



Software Modification Order

SUBJECT: Postal Automation Redirection System (PARS)
Image Management System (IMS) P&DC
Upgrade Installation v4.0.1

DATE: April 11, 2007

NO: SMO-022-07

TO: All PARS P&DC Sites

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This Software Modification Order (SMO) provides instructions for upgrading software on the PARS-IMS computers at the PARS Processing and Distribution Centers (P&DC) to version 4.0.1. Refer to Attachment 2 for eMARS reporting information.

The PARS/IMS version 4.0.1 is scheduled to be installed at sites beginning April 14th, 2007 and the last site will be completed on July 2, 2007. Hardware installation and other preparation efforts will be accomplished on Saturday and the software installation will be completed on Sunday. Attachment 1 contains the deployment schedule. It will take approximately 8 hours for a P&DC with 16 AFR readers (total sum of AFR-I + AFR-II), Add 1 hour for each 5 additional AFR readers. With the number of changes (hardware and software) to the system, length of time for the install, and difficulty of the install, USPS-MTSC and Siemens will provide Subject Matter Experts (SMEs) to each PARS modified P&DC and Remote Encoding Center (REC) to perform the software and hardware upgrades. Each site must provide a PARS trained Electronics Technician (ET) to assist with the installation. This will familiarize the local ET with the installation and post installation support which will be transferred to the local maintenance staff.

In addition to the installation of IMS version 4.0.1, the following components will be installed or upgraded to support the PARS program:

- Keyboard Video Monitor (KVM) switch w/ IP module (To be shipped to site by vendor)
- Remote Performance Diagnostic Server (To be shipped to site by vendor)
- Drive Duplicator (Software upgrade of existing duplicators)

Sites that were originally configured with three Redirection Image Controllers (RICs) will receive another RIC to upgrade their system to a four RIC configuration. This is part of the "unbundling" of the RIC processes to improve overall system performance. All IMS components will receive an Operating System (OS) upgrade to Windows XP with the "unbundling" of the RIC server tasks. This RIC installation must be performed one week before the Software Version 4.0.1 upgrade.

All PARS Input Subsystem (ISS) processing, to include Delivery Bar Code Sorter (DBCS) Combined Input/Output Subsystem (CIOSS) Image Lift, must cease by 5 PM, Saturday, prior to Sunday's installation. This gives the REC site ample time to key all results for mail pieces sent. All mail MUST be labeled prior to the install beginning at 7 AM on Sunday. During the upgrade, sites will be allowed to buffer images on the CIOSS machine.

Refer to Section 13, Release Notes for a comprehensive listing of maintenance and operational issues that were corrected in this release. Refer to Section 5, Possible Problems and Known Errors for IMS version 4.0.1. It contains valuable information for reporting and/or repairing known problems and errors.

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Direct any questions or comments concerning this bulletin to the HelpDesk, Maintenance Technical Support Center, P.O. Box 1600, Norman OK 73070-1600; telephone FTS 2000 (405) 573-2123 or toll free (800) 366-4123.

Earl J. Jones
Manager
Maintenance Technical Support Center
Maintenance Policies and Programs

- Attachments:
1. Deployment Schedule
 2. Software Release Postal Automation Redirection System (PARS) Image Management System (IMS) for P&DCs Version 4.0.1
 3. eMARS Reporting Instructions
 4. Local Record Of Bulletin Completion
 5. Release Evaluation Form

Enclosures: PARS IMS 4.0.1 P&DC Software Media Package (3 copies) consisting of:

1. PARS IMS 4.0.1 P&DC, PARS IMS/AFR Software Installation Kit (CD): Version 4.01, (Build: 32.51), P/N 600-2553-000ODT, Volume 1 of 1
2. PARS IMS 4.0.1 P&DC, PARS IMS P&DC Dictionaries (DVD): Version 4.0.1 (Build: N/A), P/N 600-2670-000ODT, Volume 1 of 1
3. PARS IMS 4.0.1 P&DC, PARS Phase I RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.103-01.ODT, Volume 1 of 2
4. PARS IMS 4.0.1 P&DC, PARS Phase I RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.103-02.ODT, Volume 2 of 2
5. PARS IMS 4.0.1 P&DC, PARS Phase II RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.102-01.ODT, Volume 1 of 2
6. PARS IMS 4.0.1 P&DC, PARS Phase II RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.102-02.ODT, Volume 2 of 2
7. PARS IMS 4.0.1 P&DC, PARS Drive Duplicator Install Image for Field Deployment (CD): Version XP, (Build: N/A), P/N 600-2730-000ODT Volume 1 of 2
8. PARS IMS 4.0.1 P&DC, PARS Drive Duplicator Install Image for Field Deployment (CD): Version XP, (Build: N/A), P/N 600-2730-000ODT Volume 2 of 2
9. PARS IMS 4.0.1 P&DC, PARS Phase II Drive Duplicator Installation Kit (CD): Version XP, (Build: N/A), P/N 66.6015.091-01.ODT Volume 1 of 2
10. PARS IMS 4.0.1 P&DC, PARS Phase II Drive Duplicator Installation Kit (CD): Version XP, (Build: N/A), P/N 66.6015.091-02.ODT Volume 2 of 2
11. PARS IMS 4.0.1 P&DC, PARS IMS Ghost Boot Disk for Drive Duplicator (Floppy Disk): Volume 1 of 2, Version N/A, (Build: N/A), P/N 66.6015.160-01.ODT
12. PARS IMS 4.0.1 P&DC, PARS IMS Ghost Boot Disk for Drive Duplicator (Floppy Disk): Volume 2 of 2, Version N/A, (Build: N/A), P/N 66.6015.160-02.ODT

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ATTACHMENT 1**DEPLOYMENT SCHEDULE**

The deployment list below is sorted by installation date.

Team Arrival Date	Site Type	Area	Site
04/14/07	REC	SW	BEAUMONT (Sys #1)
04/14/07	REC	CM	CHARLESTON WV
04/14/07	REC	SE	CHATTANOOGA (Sys #2)
04/14/07	REC	WE	GLENDALE (Sys #1)
04/14/07	REC	PA	MODESTO
04/14/07	REC	WE	SALT LAKE CITY (Sys #1)
04/14/07	REC	PA	SELMA
04/14/07	REC	WE	WICHITA (Sys #1)
04/15/07	REC	SW	BEAUMONT(Sys #2)
04/15/07	REC	WE	GLENDALE (Sys #2)
04/15/07	REC	WE	GLENDALE (Sys #3)
04/15/07	REC	WE	SALT LAKE CITY (Sys #2)
04/15/07	REC	WE	SALT LAKE CITY (Sys #3)
04/15/07	REC	WE	WICHITA (Sys #2)
04/15/07	REC	WE	WICHITA (Sys #3)
04/21/07	PH 1	CM	Baltimore
04/21/07	PH 1	EA	Cincinnati
04/21/07	PH 1	WE	Colorado Springs
04/21/07	PH 1	EA	Columbus
04/21/07	PH 1	PA	Industry (Alhambra)
04/21/07	PH 1	WE	Minneapolis
04/21/07	PH 1	NY	New York City (Morgan Station)
04/21/07	PH 1	PA	North Bay (Petaluma)
04/21/07	PH 1	SE	North Metro
04/21/07	PH 1	SW	North Texas (Coppell)
04/21/07	PH 1	CM	Northern Virginia
04/21/07	PH 1	PA	Oakland
04/21/07	PH 1	WE	Portland OR
04/21/07	PH 1	PA	Santa Clarita
04/21/07	PH 1	WE	Seattle
04/21/07	PH 1	CM	Suburban MD P&DC (Gaithersburg)
04/21/07	PH 2	WE	DENVER
04/21/07	PH 2	GL	DETROIT
04/21/07	PH 2	EA	LINDBERG PROCESSING BUILDING
04/21/07	PH 2	PA	LOS ANGELES
04/21/07	PH 2	GL	PALATINE
04/21/07	PH 2	WE	PHOENIX
04/21/07	PH 2	GL	SAINT LOUIS
04/21/07	PH 2	PA	SAN BERNARDINO
04/21/07	PH 2	PA	SAN DIEGO (M L SELLERS)
04/28/07	PH 1	SE	Mid Florida

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Team Arrival Date	Site Type	Area	Site
04/28/07	PH 1	GL	Milwaukee
04/28/07	PH 1	SE	Orlando
04/28/07	PH 2	SW	BATON ROUGE
04/28/07	PH 2	NE	BOSTON
04/28/07	PH 2	CM	CHARLOTTE
04/28/07	PH 2	EA	CLEVELAND
04/28/07	PH 2	NY	DOMINICK V DANIELS
04/28/07	PH 2	SE	FORT MYERS
04/28/07	PH 2	NE	HARTFORD
04/28/07	PH 2	SW	HOUSTON
04/28/07	PH 2	GL	INDIANAPOLIS
04/28/07	PH 2	WE	LAS VEGAS
04/28/07	PH 2	PA	LONG BEACH
04/28/07	PH 2	SW	NORTH HOUSTON
04/28/07	PH 2	NY	NORTHERN NJ METRO (TETERBORO, NJ)
04/28/07	PH 2	EA	PITTSBURGH
04/28/07	PH 2	PA	SACRAMENTO
04/28/07	PH 2	SW	SAN ANTONIO
04/28/07	PH 2	PA	SAN FRANCISCO
04/28/07	PH 2	PA	SANTA ANA
04/28/07	PH 2	EA	SOUTH JERSEY
04/28/07	PH 2	NE	SOUTHERN CT (NEW HAVEN)
05/01/07	REC	WE	SALT LAKE CITY (Sys # 4)
05/01/07	REC	WE	WICHITA (Sys #4)
05/05/07	PH 1	NY	Brooklyn
05/05/07	PH 1	NY	Queens (Flushing)
05/05/07	PH 1	WE	Salt Lake City
05/05/07	PH 2	SE	ATLANTA
05/05/07	PH 2	SW	AUSTIN
05/05/07	PH 2	SE	BIRMINGHAM
05/05/07	PH 2	NE	BUFFALO
05/05/07	PH 2	GL	CAROL STREAM
05/05/07	PH 2	GL	GREATER MICHIGAN (GRAND RAPIDS)
05/05/07	PH 2	CM	GREENSBORO
05/05/07	PH 2	SE	JACKSONVILLE
05/05/07	PH 2	WE	KANSAS CITY MO
05/05/07	PH 2	NY	KILMER (EDISON)
05/05/07	PH 2	EA	LOUISVILLE
05/05/07	PH 2	SE	MIAMI
05/05/07	PH 2	NY	MID ISLAND (MELVILLE)
05/05/07	PH 2	SE	NASHVILLE
05/05/07	PH 2	CM	NORFOLK
05/05/07	PH 2	CM	RALEIGH
05/05/07	PH 2	CM	RICHMOND
05/05/07	PH 2	WE	SAINT PAUL
05/05/07	PH 2	SE	SOUTH FLORIDA (PEMBROKE PINES)
05/05/07	PH 2	SE	TAMPA
05/05/07	PH 2	SE	WEST PALM BEACH
05/05/07	PH 2	NY	WESTCHESTER

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Team Arrival Date	Site Type	Area	Site
05/12/07	PH 1	CM	Dulles
05/12/07	PH 1	NE	Middlesex-Essex
05/12/07	PH 1	NY	Monmouth (Eatonton)
05/12/07	PH 1	PA	Pasadena
05/12/07	PH 1	NE	Syracuse
05/12/07	PH 2	EA	AKRON
05/12/07	PH 2	NE	ALBANY
05/12/07	PH 2	SW	ALBUQUERQUE
05/12/07	PH 2	NE	CENTRAL (WORCESTER) MA
05/12/07	PH 2	WE	DES MOINES
05/12/07	PH 2	CM	FAYETTEVILLE
05/12/07	PH 2	EA	LANCASTER
05/12/07	PH 2	GL	LANSING
05/12/07	PH 2	SE	MEMPHIS
05/12/07	PH 2	SW	NEW ORLEANS
05/12/07	PH 2	SW	OKLAHOMA CITY
05/12/07	PH 2	WE	OMAHA
05/12/07	PH 2	NE	PROVIDENCE
05/12/07	PH 2	NE	ROCHESTER
05/12/07	PH 2	PA	SAN JOSE
05/12/07	PH 2	GL	SOUTH SUBURBAN
05/12/07	PH 2	CM	SOUTHERN MD
05/12/07	PH 2	WE	SPOKANE
05/12/07	PH 2	SE	ST PETERSBURG
05/12/07	PH 2	SW	TULSA
05/19/07	PH 1	EA	Charleston WV
05/19/07	PH 1	WE	Everett
05/19/07	PH 1	GL	Gary
05/19/07	PH 1	EA	Lexington
05/19/07	PH 1	GL	Madison
05/19/07	PH 1	PA	Oxnard
05/19/07	PH 2	NE	BROCKTON
05/19/07	PH 2	CM	COLUMBIA
05/19/07	PH 2	SE	FORT LAUDERDALE
05/19/07	PH 2	CM	GREENVILLE
05/19/07	PH 2	SE	JACKSON
05/19/07	PH 2	GL	KALAMAZOO
05/19/07	PH 2	SE	MANASOTA
05/19/07	PH 2	NY	MID HUDSON
05/19/07	PH 2	SE	PENSACOLA
05/19/07	PH 2	EA	ROANOKE
05/19/07	PH 2	SW	SHREVEPORT
05/19/07	PH 2	WE	SPRINGFIELD
05/19/07	PH 2	NE	SPRINGFIELD
05/19/07	PH 2	NE	STAMFORD
05/19/07	PH 2	PA	STOCKTON
05/19/07	PH 2	EA	TOLEDO
05/19/07	PH 2	NY	TRENTON
05/19/07	PH 2	WE	TUCSON

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Team Arrival Date	Site Type	Area	Site
05/19/07	PH 2	NY	WESTERN NASSAU
06/02/07	PH 1	WE	Anchorage
06/02/07	PH 1	EA	Bowling Green
06/02/07	PH 1	EA	Charleston SC
06/02/07	PH 1	SW	East Texas (Tyler)
06/02/07	PH 1	PA	Santa Barbara
06/02/07	PH 1	EA	Youngstown
06/02/07	PH 2	PA	ANAHEIM CA (rioss) / SANTA ANA CA (host)
06/02/07	PH 2	PA	BAKERSFIELD
06/02/07	PH 2	SW	BEAUMONT
06/02/07	PH 2	GL	BLOOMINGTON
06/02/07	PH 2	WE	BOISE
06/02/07	PH 2	WE	CEDAR RAPIDS
06/02/07	PH 2	SW	CORPUS CHRISTI
06/02/07	PH 2	CM	FLORENCE
06/02/07	PH 2	CM	FREDERICK
06/02/07	PH 2	WE	KANSAS CITY KS
06/02/07	PH 2	SW	LAFAYETTE
06/02/07	PH 2	NE	MANCHESTER
06/02/07	PH 2	SW	MCALLEN
06/02/07	PH 2	SE	MONTGOMERY
06/02/07	PH 2	NY	NEWARK
06/02/07	PH 2	WE	QUAD CITIES (ROCK ISL)
06/02/07	PH 2	WE	TACOMA
06/02/07	PH 2	WE	WICHITA
06/09/07	PH 1	SW	Abilene TX (Rioss) / Fort Worth (Host)
06/09/07	PH 1	PA	Mojave CA (Rioss) / Pasadena (Host)
06/09/07	PH 1	NE	Watertown NY (Rioss) / Syracuse (Host)
06/09/07	PH 2	SW	AMARILLO
06/09/07	PH 2	CM	ASHEVILLE
06/09/07	PH 2	SE	ATHENS (rioss) / NORTH METRO (host)
06/09/07	PH 2	EA	CANTON
06/09/07	PH 2	SE	CHATTANOOGA
06/09/07	PH 2	EA	CLARKSBURG
06/09/07	PH 2	SE	DAYTONA BEACH
06/09/07	PH 2	EA	ERIE
06/09/07	PH 2	EA	EVANSVILLE
06/09/07	PH 2	PA	FRESNO
06/09/07	PH 2	SE	GAINESVILLE
06/09/07	PH 2	SE	HUNTSVILLE
06/09/07	PH 2	SE	LAKELAND FL
06/09/07	PH 2	EA	LIMA
06/09/07	PH 2	EA	LYNCHBURG
06/09/07	PH 2	EA	MANSFIELD (rioss) / CANTON (host)
06/09/07	PH 2	SE	MOBILE
06/09/07	PH 2	EA	READING
06/09/07	PH 2	WE	RENO
06/09/07	PH 2	GL	ROCKFORD
06/09/07	PH 2	WE	SAINT CLOUD

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Team Arrival Date	Site Type	Area	Site
06/09/07	PH 2	GL	SOUTH BEND
06/16/07	PH 1	NY	Bronx
06/16/07	PH 1	CM	Linthicum
06/16/07	PH 1	WE	Provo (Rioss) / Salt Lake City (Host)
06/16/07	PH 1	NY	Staten Island NY (Rioss) / Brooklyn (Host)
06/16/07	PH 2	EA	ASHLAND (rios) / LEXINGTON (host)
06/16/07	PH 2	NE	CAPE COD (rios) / PROVIDENCE (host)
06/16/07	PH 2	WE	CAPE GIRARDEAU
06/16/07	PH 2	CM	CHARLOTTESVILLE
06/16/07	PH 2	WE	CHEYENNE
06/16/07	PH 2	WE	EAU CLAIRE
06/16/07	PH 2	GL	FORT WAYNE
06/16/07	PH 2	WE	GRAND JUNCTION (rios) / COLORADO SPRINGS (host)
06/16/07	PH 2	GL	IRVING PARK ROAD (CHICAGO N)
06/16/07	PH 2	SE	JOHNSON CITY (rios) / KNOXVILLE (host)
06/16/07	PH 2	WE	LINCOLN
06/16/07	PH 2	SW	LUBBOCK
06/16/07	PH 2	WE	MANKATO
06/16/07	PH 2	PA	MARYSVILLE
06/16/07	PH 2	WE	ROCHESTER
06/16/07	PH 2	GL	SAGINAW
06/16/07	PH 2	WE	SIOUX CITY
06/16/07	PH 2	SE	SOUTH GEORGIA (MACON)
06/16/07	PH 2	CM	WASHINGTON DC (CURSEEN/MORRIS)
06/16/07	PH 2	WE	WATERLOO
06/16/07	PH 2	NY	WEST JERSEY
06/23/07	PH 2	EA	ALTOONA (rios) / NEW CASTLE (host)
06/23/07	PH 2	GL	CHAMPAIGN
06/23/07	PH 2	WE	DULUTH
06/23/07	PH 2	GL	GAYLORD (rios) / TRAVERSE CITY (host)
06/23/07	PH 2	WE	GRAND ISLAND
06/23/07	PH 2	SE	GULFPORT
06/23/07	PH 2	SE	JACKSON (rios) / CHATTANOOGA (host)
06/23/07	PH 2	EA	JOHNSTOWN (rios) / ERIE (host)
06/23/07	PH 2	GL	KOKOMO
06/23/07	PH 2	WE	LA CROSSE (rios) / ROCHESTER (host)
06/23/07	PH 2	GL	MUNCIE
06/23/07	PH 2	EA	NEW CASTLE
06/23/07	PH 2	EA	PADUCAH (rios) / EVANSVILLE (host)
06/23/07	PH 2	SE	PANAMA CITY (rios) / DAYTONA BEACH (host)
06/23/07	PH 2	NE	PORTSMOUTH
06/23/07	PH 2	GL	TRAVERSE CITY

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ATTACHMENT 2

SOFTWARE RELEASE

POSTAL AUTOMATION REDIRECTION SYSTEM (PARS)

IMAGE MANAGEMENT SYSTEM (IMS)

FOR P&DCS

VERSION 4.0.1

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1. SCOPE

This document provides a description of the Postal Automation Redirection System (PARS) Image Management System (IMS) software upgrade from Version 3.0.0 to Version 4.0.1. This release consolidates all software patches and updates thus far. Instructions are provided to install this software version on the following computer systems that constitute the PARS IMS:

- Redirection Image Controller (RIC) server
- Advanced Forwarding Reader (AFR) server
- Supervisor User Interface (UI) server

1.1. IDENTIFICATION

System:	PARS Image Management Software
Acronym:	IMS
Version:	PARS IMS Version 4.0.1 Build 32.51
Release Date:	April, 2007
Recipients of documents:	All PARS P&DC sites USPS (United States Postal Service) Engineering Maintenance Technical Support Center (MTSC) Operations Technical Support (OTS) National Center for Employee Development (NCED)

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1.2. SYSTEM OVERVIEW

PARS is a system for intercepting mail items early in the distribution chain and providing the complete redirection processing nationwide. Refer to Figure 1-1.

It will support the Computerized Forwarding System (CFS) sites in processing forwarding mail, the postmaster by providing up-to-date forwarding information, and the National Customer Support Center (NCSC) by providing notification requests and printing the Hard Copy Notifications (HCN) as 3547 forms.

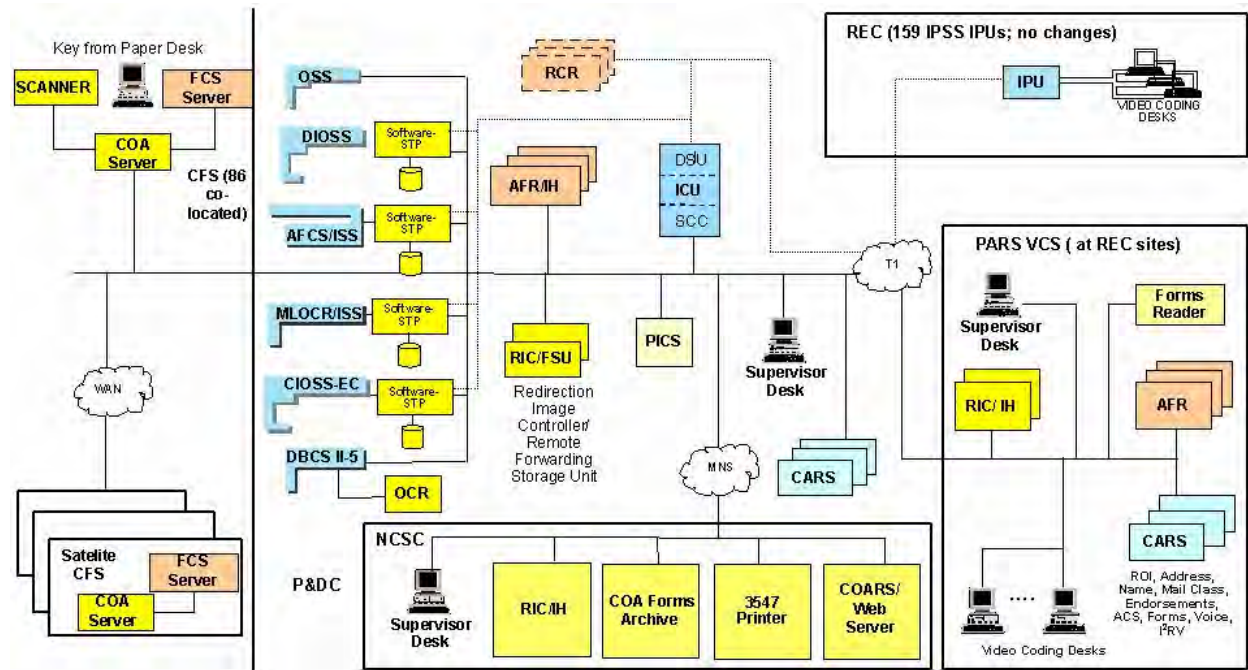


Figure 1-1. Overview of PARS Architecture

Mail Processing Equipment (MPE) is modified to intercept forwarding mail as early as possible and to process forwarding mail according to the USPS policies and procedures.

Change of Address (COA) forms data capturing is fully supported by PARS and the resulting COA records are distributed nationwide.

The PARS subsystems that are provided with this software version are RIC (Redirection Image Controller), FSU (Forwarding Storage Unit), AFR (Advanced Forwarding Reader), CFR (COA Forms Reader) adapters, UI (User Interface), QF (Quality Functions)/CTS (Computerized Forwarding System), and VDT (Video Display Terminal). They build the core of the PARS IMS software.

- The Redirection Image Controller (RIC) and the Forwarding Storage Unit (FSU) control the data flow of the forwarding mail and COA forms processing nationwide, as well as the labeling process.
- The User Interface (UI) provides a means to the supervisor for interactive monitoring and control of the distributed PARS.
- The Quality Function (QF) and Coding Training System (CTS) provide a means to monitor and train the skill level of individual Data Conversion Operators (DCO).

- The Video Display Terminal (VDT) is software for interactive capturing of forwarding information by DCOs.
- The Automatic Forwarding Reader (AFR) is an automatic recognition engine that provides automatic batch capturing of forwarding information. There are two types of AFRs: AFR-I and AFR-II. An image is first recognized by an AFR-II and then by an AFR-I. The AFR-I also combines both results to the final AFR result.
- The COA Forms Reader (CFR) is an automatic recognition engine that provides automatic batch capturing of COA form information. There are also two types of CFRs called CFR-I and CFR-II. Similar to the AFR, the results of both are combined to finalize CFR result. A separate CFR SVD (Software Version Description) is provided to install the CFR itself. However, on the CFR computer, a CFR adapter is installed as part of the IMS system.

Project Sponsor: USPS Engineering, Letter Mail Technology

User: All PARS P&DC sites

Developer: Siemens

Maintenance Organization: MTSC

1.3. DISTRIBUTION

In-plant test: Siemens facilities, Arlington

Single site test: Ft. Wayne, IN REC
Fox Valley P&DC
Flint P&DC

Multi-Site Test Site: Pittsburgh REC
Chattanooga REC
Harrisburg P&DC
Knoxville P&DC
Chicago P&DC

Deployed Sites: All PARS P&DC sites

Distribution Process: Installation via MTSC by Technical Support
Representatives (TSR) or Siemens Field Service

Tested version: PARS IMS Version 4.0.1 (Build 32.51)

1.4. SYSTEM IMPACT

The PARS system impacts the CFS processing and the forward processing in its entirety.

- COA forms will be captured at the COA server and coded as well as distributed by the IMS system.
- The majority of Undeliverable as Addressed (UAA) items are intercepted at all letter mail equipment before delivery to the recipient.
- Confirmed UAA mail is lifted and labeled at the Combined Input-Output Sub-System (CIOSS).

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1.4.1. Operations Impact

The PARS IMS supports this process with Automatic Readers and coding of forwarding mail at P&DC sites.

Clear the IMS before Installation.

To reduce the amount of data to be saved before and restored after upgrade installation, the IMS should have as few images and results stored as possible.

It is recommended for the P&DC to schedule the following measures in advance to the installation maintenance window:

- Stop Image Lifting in PARS mode early enough and disable the SWSTP and SCC connection so there is a chance to finalize the images already in the IMS.
- Stop COA form scanning in the CFS sites assigned, if any.
- The REC site assigned to the P&DC should be prepared to key all images as far as possible. Verify in the UI Statistics > REC Statistics that the counter "Processing" is 0.
- Finally, the P&DC should label all outstanding mailpieces as far as possible.

There should not be more than 20,000 images in the system when the Data Save is started. To check the amount of images still in the IMS, select **UI Statistics** and **Image Storage**. In the Image Storage Statistics window, the "IH id" must be set to "Total". To look for the counter, select **Images** and **Stored**.

P&DCs with 3-RIC IMS should expand to 4 RICs under IMS 3 in advance.

If possible, the enlargement of a 3-RIC IMS to 4-RIC IMS should be done before the maintenance window for IMS 4 upgrade installation, i.e. with IMS 3 still running.

For the procedure on how to setup a new computer box (FRU) for IMS 3, refer to the document [R7].

NOTE

The first RIC is installed – thus numerous steps from the setup can be skipped as stated in the IMS 3 SVD.

Additionally, the site configuration has to be expanded by one RIC, using the Deployment Editor. Refer to section 10.7.3.1, "Adaptation of the Site Configuration with the Deployment Editor".

NOTE

Do not use the "Prepare Deploy" tool; the installer will detect the new computer automatically.

- KVM switch

The procedures in this SMO are written on the assumption that each P&DC is equipped with switches to connect keyboard, monitor, and mouse to at least all RICs and the AFR-I 01.

- Unbundling on RICs

With the introduction of IMS 4, functions formerly running on all RIC servers have been “unbundled”. Prior to IMS 4, all basic functions IC, FSU, and CDB (Statistics & Quality Functions) were available on each RIC.

Except for 2-RIC P&DCs that are unchanged, starting with IMS 4, the functions will be separated in such a way that FSU & CDB will run on RIC 01 and RIC 02 while the IC will run on the remaining RICs.

- Configuration Server

For all P&DCs RIC 01 will be the Configuration Server as before, i.e. installations are performed from RIC 01, directories are loaded to RIC 01, and then distributed to the IMS.

- IMS Hardware – Phase I or Phase II

Throughout this SMO, the description is based on the assumption that a P&DC has no hardware mix of Phase I and Phase II IMS computers.

- Naming Convention

Throughout this SMO, “RIC” is the name used for those 2, 4, or 5 computer boxes running a component FSU/CDB or IC (see UI System > Start/Stop dialog to see the assignment).

The PARS net IP addresses of the RIC computers are usually 10.10.16.186, .187, .188, .189, and .190.

In contrast to the hardware related denomination “RIC”, the software function “Image Controller” is now called “IC”. This is different from former releases where the term “RIC” was used for both hardware box and function.

1.4.2. Maintenance Issues

From a maintenance perspective, PARS IMS is a redundant system that compensates the failure of a computer with graceful degradation. The availability of computers belonging to IMS is visualized on Supervisor UIs, which allows maintenance personnel to replace Field Replaceable Units (FRU) seamlessly.

Weekly Preventive Maintenance (PM)

Preventive maintenance procedures should be performed on a weekly basis to limit the creation of system log files to the extent required to troubleshoot the system based on that information.

It is recommended to perform this maintenance during a time of no mail or COA form processing, e.g. about 15 minutes after the automatic tour change occurred.

If uncertain about the current setting of the automatic tour change, check the information in the System Status section of the Site Overview window, where the time of the last tour change is indicated (Figure 1-2).

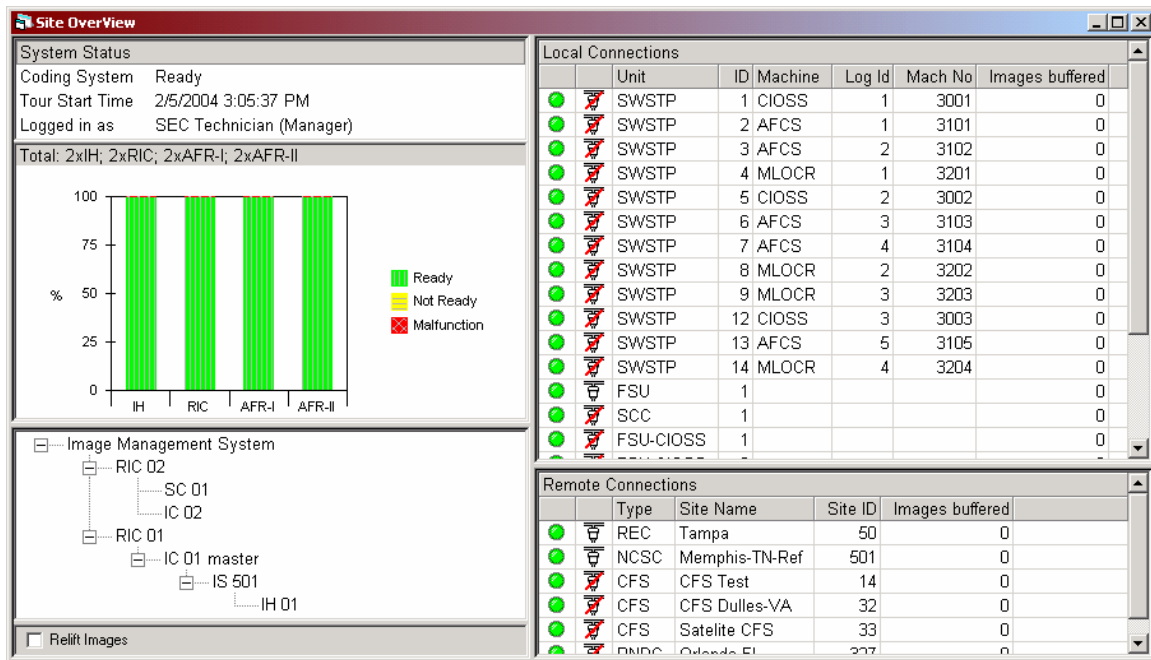


Figure 1-2. P&DC Site Overview in Supervisor UI (tour change at 5:00 am)

Restart IMS:

On the Supervisor UI of the First RIC, select **System** and **Start/Stop** from the pull down menu. The Start/Stop dialog screen is displayed (Figure 1-3).

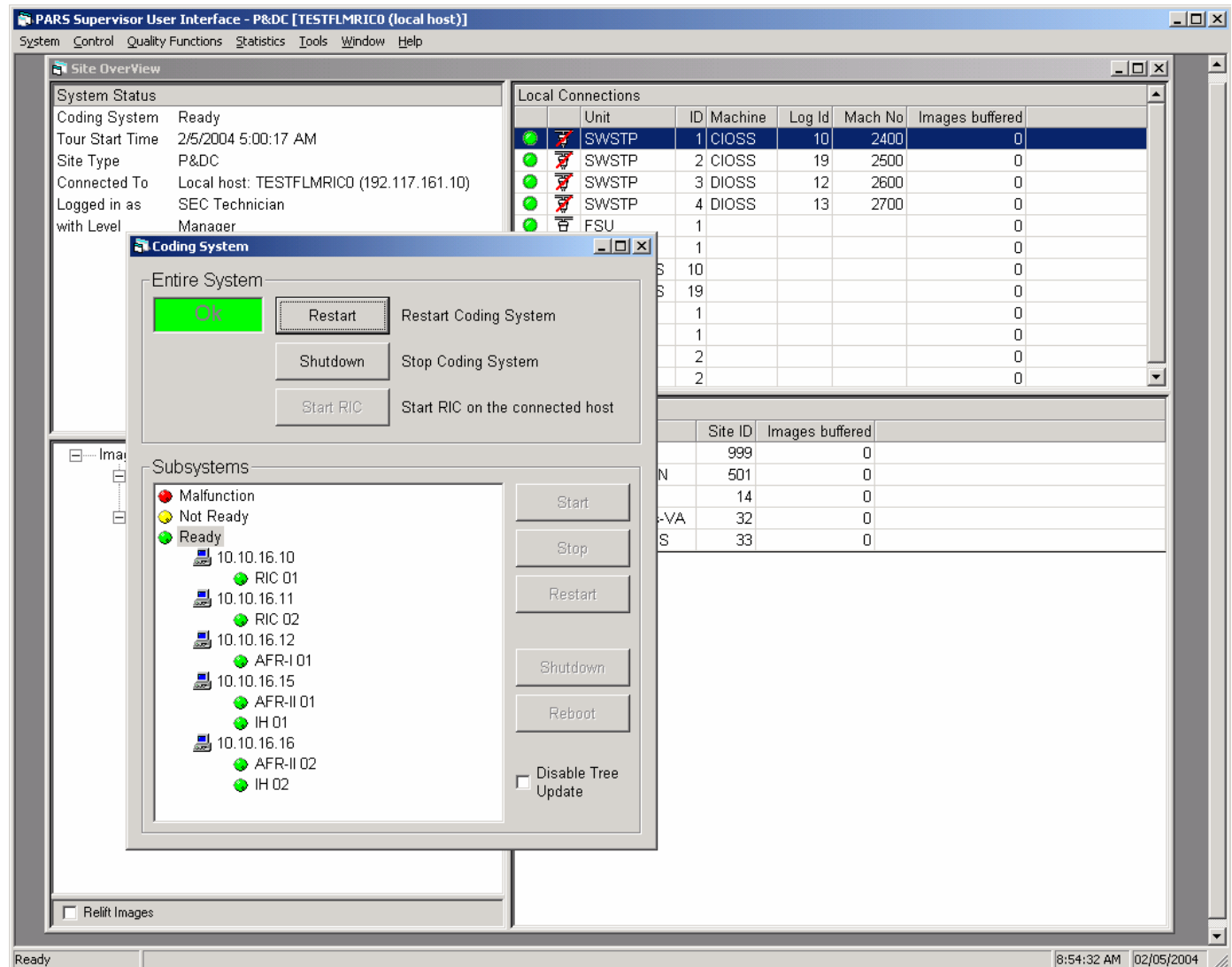


Figure 1-3. Start/Stop Dialog

Check availability of all devices that are currently used. In general, all devices that are turned on should be listed under the green 'Ready' entry.

Press the **Restart** button (Restart Coding System) of the dialog to restart the entire IMS. Confirm by pressing **Ok** in the displayed message box to continue.

During the restart, the devices will change from "Ready" to the "Not Ready" entry and back to "Ready".

Wait for several minutes until all the devices listed are back again and ready. If one or more of the devices do not show up as ready again, follow the maintenance procedures for malfunctioning devices.

NOTE

The time required for a complete system restart can vary widely. It is considerably influenced by the amount of entries in the FSU:

3 million entries take about 5 minutes

5 million entries take from 15 – 20 minutes

1.5. SYSTEM DEPENDENCIES/INTERFACES**1.5.1. System Dependencies**

The PARS subsystems: RIC, FSU, AFR, UI, QF/CTS, VDT, and CFR adapter build the kernel system of the forwarding control software.

Non-CIOSS site connection configuration

To properly re-establish connections between a non-CIOSS site and the corresponding host CIOSS site for IMS 4.0.1, perform the following steps:

1. Upgrade host CIOSS site from IMS 3.0 to 4.0.1
2. Upgrade non-CIOSS site from IMS 3.0 to 4.0.1
3. Reconfigure the connections from non-CIOSS site to host CIOSS site.

1.5.2. Interfaces

External interfaces that are not part of this software release are the PARS subsystems:

- Change-of-Address Record Server (CARS), Version 2.5, or later
- Software Storage and Transfer Processor (SWSTP), build 9225 or later
- COA-Server, Version 2.1.0 or later (EC7697 ICOA rejects is only possible with these versions)
- CFR-I, Version 2.0.0, build 1060 or later
- CFR-II, all Versions
- Image Processing Sub-System (IPSS), Version 6.6 or later
- Primary Identification Code Server (PICS), Version 2.6b7 or later
- Direct Connect System (DCS) Server
- National Directory Support System (NDSS) Server
- National Customer Support Center (NCSC)

NOTE

For interoperability reasons, P&DCs must have IMS 3 installed.

For information on configuration, using DNS or ALIAS NAMES, contact the Maintenance Technical Support Center (MTSC) at 1-800-366-4123.

2. VERSION DESCRIPTION

2.1. MATERIALS RELEASED

The following media is released with this SMO:

1. PARS IMS 4.0.1 P&DC, PARS IMS/AFR Software Installation Kit (CD): Version 4.01, (Build: 32.51), P/N 600-2553-000ODT, Volume 1 of 1
2. PARS IMS 4.0.1 P&DC, PARS IMS P&DC Dictionaries (DVD): Version 4.0.1 (Build: N/A), P/N 600-2670-000ODT, Volume 1 of 1
3. PARS IMS 4.0.1 P&DC, PARS Phase I RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.103-01.ODT, Volume 1 of 2
4. PARS IMS 4.0.1 P&DC, PARS Phase I RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.103-02.ODT, Volume 2 of 2
5. PARS IMS 4.0.1 P&DC, PARS Phase II RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.102-01.ODT, Volume 1 of 2
6. PARS IMS 4.0.1 P&DC, PARS Phase II RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.102-02.ODT, Volume 2 of 2
7. PARS IMS 4.0.1 P&DC, PARS Drive Duplicator Install Image for Field Deployment (CD): Version XP, (Build: N/A), P/N 600-2730-000ODT Volume 1 of 2
8. PARS IMS 4.0.1 P&DC, PARS Drive Duplicator Install Image for Field Deployment (CD): Version XP, (Build: N/A), P/N 600-2730-000ODT Volume 2 of 2
9. PARS IMS 4.0.1 P&DC, PARS Phase II Drive Duplicator Installation Kit (CD): Version XP, (Build: N/A), P/N 66.6015.091-01.ODT Volume 1 of 2
10. PARS IMS 4.0.1 P&DC, PARS Phase II Drive Duplicator Installation Kit (CD): Version XP, (Build: N/A), P/N 66.6015.091-02.ODT Volume 2 of 2
11. PARS IMS 4.0.1 P&DC, PARS IMS Ghost Boot Disk for Drive Duplicator (Floppy Disk): Volume 1 of 2, Version N/A, (Build: N/A), P/N 66.6015.160-01.ODT
12. PARS IMS 4.0.1 P&DC, PARS IMS Ghost Boot Disk for Drive Duplicator (Floppy Disk): Volume 2 of 2, Version N/A, (Build: N/A), P/N 66.6015.160-02.ODT

2.2. SUMMARY OF CHANGES

Refer to Section 13 for detailed descriptions of changes in this release.

2.3. ADAPTATION DATA

The entire configuration of a site, including deployment and connections to other sites (e.g. the connection to a possible associated REC site) or services, is maintained in the file siteconfig.ini. The Site Config Editor (also called Deployment Editor) ensures the file structure is not accidentally destroyed when making changes. The first site-specific siteconfig.ini file is provided by Siemens field service when PARS is initially deployed at a site.

3. INSTALLATION OVERVIEW

This document describes the configuration of a P&DC-Site.

NOTE

The installation of a single subsystem (computer box) is described in an additional document, "PARS IMS P&DC Individual System Recovery IMS Version 4.0.1", located on the MTSC web site.

The installation consists of the following:

- Drive Duplicator: installation of operating system and setup for IMS installation
- AFR-I 01: installation of new operating system, network setup, and setup for automatic network configuration.
- Data Save from IMS 3 to drive duplicator
- Cloning of new OS from AFR-I 01 hard disk to RIC / AFR / SUI hard disks
- Copying IMS software packages on RIC 01 hard disk
- IMS 4.0.1 setup on RIC 01
- IMS 4.0.1 deployment
- Data Restore
- Verification procedures

Section 10.1.1, "Installation Checklist" contains the installation checklist that ensures that all required information is available.

All prerequisites are provided in section 10.1.2, "Installation Prerequisites".

The installation instructions for IMS 4.0.1 installation are provided in the sections starting at 10.2.

The procedures for verifying a proper installation are described in section 11, "Post-installation Verification Procedures".

In the unlikely event of a catastrophic recovery, refer to Section 12, "Catastrophic Recovery Procedures", where required installation procedures are described.

4. OPERATIONAL PROCEDURES

4.1. RESTART AND REBOOT

Never disconnect a single RIC or all RICs from the network during restart or reboot. All RICs must be properly connected to the Local Area Network when restarting the IMS system or single RICs to avoid a mix-up of Master IC responsibilities, which causes delays due to additional synchronization requirements.

4.2. PERMANENT SHUTDOWN OF RICS

Never shutdown more than one RIC permanently, otherwise this may shutdown all databases for a given database type: Quality Function, Operator and Statistics.

5. POSSIBLE PROBLEMS AND KNOWN ERRORS

5.1. CONNECTING TO RPDS WEB-UI (ECR 8068)

Starting the Web Browser for RPDS will result in an error message page from the Internet Explorer. It tries to connect to a Microsoft web page which is not supported from the PARS environment. The Internet Explorer default page is configured as part of the RPDS1.0.0 installation. This is described in RPDS 2.0.0 SVD. After completing these installation steps, the Internet Explorer will automatically connect to the proper RPDS web address (URL).

5.2. LABEL RECOGNITION TASK INDICATORS (ECR 7588)

The correct "Label Recognition Task Indicators" are not printed on the forwarding label for all combinations of Recognition task contributions from AFRs and keyers. The failed test "Label Recognition Task Indicators" only impacts the forwarding labels. However, no operational errors occur. (PT 45033, 45309)

5.3. XAI2 VERSION NAME AFTER DOWNLOAD FROM NDSS SERVER

The XAI2 version indicator generated from the NDSS download script does not reflect the dictionary version reported by the readers. (PT 59682)

5.4. STARTING A RIC IMMEDIATELY AFTER LOGOFF – (AUTO-) LOGON

After stopping the RIC, logging off as the cool user, and (auto-)logon occurs, it may not be possible to start that RIC immediately from the UI Logon dialog via Start System (after checking "I agree").

Solution: wait approximately two minutes and then re-click on Start System for the RIC to startup. (PT 61055)

5.5. FIX REQUIRED FOR VCC_IDS.CFG CONFIGURATION FILE

In a site with 4 or 5 RICs, the automatically generated vcc_ids.cfg configuration file needs to be manually edited when the "Deploy" button from InstallUI has been clicked. See Section 10.9, Perform a fix into the vcc_ids.cfg file.

5.6. MISSING LEADING ZERO ON ADDRESS NUMBERS OF PARS LABEL

Leading zeros are not printed where the COA Record shows a leading zero. House numbers should be printed exactly as they appear in the COA Record. This will be fixed in IMS 6.0 (PT 62251).

5.7. INSTALLER CAN NOT UNINSTALL DEPLOYED COMPONENTS

The PARS installer can not uninstall deployed components. This must be done manually, as described in section 10.15.1.5. This will be corrected with IMS 5. (PT 3539)

5.8. UI RESTARTS ITSELF WHEN CONNECTION PROBLEMS TO DATABASE ARE DETECTED

In some cases, the UI loses the connection to the QF database. Rather than staying in a frozen state or displaying wrong information, the UI is terminated and restarted to reestablish connection. (PT 69094)

5.9. OLD CITY NAME ON FORM 3547

When form 3547 label text is generated, the old city name, instead of the new one is entered. This has no operational impact on processing. (PT 71090)

5.10. AFR-I MAY BE RESTARTED DURING REVERSE SIDE IMAGE LIFTS

It was observed that during Reverse Side image lifts, AFR-I restarts may occur. The restarts are due to incomplete pre-knowledge information, originating from the previous front side scan and read attempt. The affected images are then passed on to the REC for keying. Quantitative analyses have shown that the overall impact is moderate. Moreover, the AFR-I will be changed in future IMS releases to no longer restart on incomplete or unexpected pre-knowledge input data. (PT 72666).

5.11. RPDS UI NOT AVAILABLE ON FLOOR SUP UI AT SUPERVISOR LEVEL.

The workaround is to log in to the Supervisor UI as Technician, go to the Tools menu, and open the RPDS GUI login screen. This RPDS login screen will also appear after a 15 minute user inactivity timeout. Do not close this window. Log out of the supervisor UI and log in as Supervisor again. The RPDS GUI window remains available (PT 76564).

5.12. 4-STATE BARCODE DATA INFORMATION IS NOT POPULATED IN ACS RECORDS FROM IMS

The 4-state barcode character string is not provided with IMS 4.0.1 to NCSC. The Planetcode field of the ACS record field description was extended by USPS to provide the 4-state information with IMS 5. (PT 77064, 76539)

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6. DOCUMENTATION AND REFERENCES

6.1. DOCUMENTS

Table 1-1. Documentation and References

	Document Id	Document Title (Filename)	Version
[R1]	516-13144	PARS keyer handbook	- D -
[R2]	516-13120	CFPS keyer handbook	- K -
[R3]	516-13121	CFPS Supervisor User Guide	- G -
[R4]	516-13145	PARS Supervisor User Guide	- H -
[R5]	516-13228	PARS MAINTENANCE HANDBOOK	- F -
[R6]	730-00298	PARS IMS P&DC Individual System Recovery IMS Version 4.0.1	- 5 -
[R7]	51 6-14224	PARS IMS Software Version Document (SVD) Addendum P&DC Individual System Recovery Version 3.0.0	- 2 -

6.2. MEDIA

Refer to section 2.1, Materials Released.

Additional Documents and Medias for catastrophic recovery are listed in section 12.

7. CHANGE REQUEST PROCEDURES

All change requests should be submitted on an Engineering Change Request (ECR) form. The form is available via the USPS Engineering web server at <http://web.eng.usps.gov> by highlighting "Forms" in the left column, "Engineering Change Request".

NOTE

Do not click until the words: "Engineering Change Request" is highlighted.

Send completed ECR to:

USPS Engineering
Letter Mail Technology
8403 Lee Highway
Merrifield VA 22082-8101

The project leader is responsible for:

- Reviewing the request
- Notifying the developers of required changes
- Setting a deployment date to allow time for implementation of the changes
- Providing resolution to the requestor

8. PROBLEM REPORTING PROCEDURES

Any problems or questions should be addressed to the MTSC at 1-800-366-4123. The MTSC will take the appropriate information regarding the problem or question and attempt to resolve it. Resolution information will be provided to the requester by the MTSC.

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9. NOTES - ACRONYMS

This section contains an explanation of acronyms used in this document

Acronym	Meaning
ACS	Address Change Service
AFCS	Advanced Facer Cancellor System
AFR	Advanced Forwarding Reader
AFR-I	Advanced Forwarding Reader Type I
AFR-II	Advanced Forwarding Reader Type II
CARS	Change-of-Address Record Server
CFPS	COA Forms Processing System
CFR	COA Forms Reader
CFR-I	COA Forms Reader Type I
CFR-II	COA Forms Reader Type II
CFS	Computerized Forwarding System
CIOSS	Combined Input-Output Sub-System
COA	Change of Address
COARS	Change-of-Address Reporting System
CTS	Computerized Training System
DCO	Data Conversion Operator
DCS	Direct Connect System
DIOSS	Delivery Bar Code Sorter with Optical Character Reader, Input/Output Subsystem
DNS	Domain Name System
DPC	Delivery Point Code
ECR	Engineering Change Request
FAT	First Article Test
FRU	Field Replaceable Units
FSU	Forwarding Storage Unit
FTP	File Transfer Protocol
HCN	hard copy notification
IC	Image Controller
ID	Identification
IH	Image Handler
IMS	Image Management System
IP	Internet Protocol
IPSS	Image Processing Sub-System
KVM switch	Keyboard, Video (Monitor), Mouse switch
MLOCR	Multi-Line Optical Character Reader
MNS	Managed Network Services
MPE	Mail Processing Equipment
MSDE	Microsoft SQL Server Desktop Engine
MSI	Microsoft Installer
MTOOL	Maintenance Tool
MTSC	Maintenance Technical Support Center
NCED	National Center for Employee Development
NCSC	National Customer Support Center

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Acronym	Meaning
NDSS	National Directory Support System
nUAA	non UAA (Undeliverable As Addressed)
OS	Operating System
OTS	Operations Technical Support
P&DC	Processing and Distribution Center
PARS	Postal Automation Redirection System
PICS	Primary Identification Code Server
PM	Preventive Maintenance
QF	Quality Functions
REC	Remote Encoding Center
REM CON	Remote Connection Box
RIC	Redirection Image Controller
RIOSS	Remote Input/Output Subsystem
RPDS	Remote Performance Diagnostic Server
RTS	Return-to-Sender
SCC	System Control Computer
SP2	Microsoft Windows Service Pack 2
SQL	Structured Query Language
SVD	Software Version Description
SW	Software
SWSTP	Software Storage and Transfer Processor
TAR	Technical Analysis Report
TSR	Technical Support Representative
UAA	Undeliverable as Addressed
UI	User Interface
UMF	Universal Mailer File
USB	Universal Serial Bus
VCD	Video Coding Device (a.k.a. VDT)
VCS	Video Coding System
VDT	Video Display Terminal (a.k.a. VCD)

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10. INSTALLATION INSTRUCTIONS

The installation process consists of the following:

- Upgrade a site with three RICs to four RICs
- Drive Duplicator: installation of Operating System and setup for IMS installation
- AFR-I 01: installation of new Operating System, network setup, and setup for automatic network configuration.
- Data Save from IMS 3 to Drive Duplicator
- Cloning of new OS from AFR-I 01 hard disk to RIC / AFR / SUI hard disks
- Copying IMS software packages on RIC 01 hard disk
- IMS 4.0.1 Setup on RIC 01
- IMS 4.0.1 Deployment
- Data Restore
- Verification procedures

10.1. PRE-INSTALLATION INSTRUCTIONS

The following sections provide detailed instructions for an upgrade installation for P&DC sites currently running IMS 3 software.

NOTE

At a site with three RICs, perform the upgrade to four RICs, one week before IMS 3.0 to IMS 4.0.1 upgrade. A site with three RICs is not working properly with IMS 4.0.1. For details for adding a RIC refer to [R7].

The complete process will take approximately 8 hours for a P&DC with 16 AFR readers (total sum of AFR-I + AFR-II); add 1 hour for each 5 additional AFR readers. Read all installation instructions before attempting the installation.

NOTE

Do not replace any hardware during the installation, since the scripts for automatic network configuration rely on finding the same network adapters (MAC addresses) after upgrade to the new Operating System.

10.1.1. Installation Checklist

Use Table 1-2 during installation to write down remarks.

Table 1-2. Installation Checklist

Description	Y/N	Remarks
Pre-Installation issues		
Upgrade to 4 RICs performed if necessary		
Administrator account name and password		
Installation devices available Floppy drive, CD/DVD drive (USB)		
Pre-formatted Floppy Disk		
PARS IMS release (OS Images, IMS software, dictionaries)		
IP address and share of the backup computer		
IP-Address DNS Server (if DNS is to be configured)		
Drive Duplicator computer with Ghost software		
Ghost Boot Disks for drive duplicator		
Former 3-RIC P&DC extended to 4-RIC P&DC		
Less than 20,000 Images in IMS system		
Performed Tour Change		
2 hours before Upgrade disconnect STP		
Site configuration list (siteconfig.ini) at hand		
Site installation issues		
Drive Duplicator setup and connected to LAN		
IMS 3 network configuration collected		
IMS 3 data backup done		
AFR-I 01 drive installed (to be used as master for cloning)		
All drives cloned from AFR-I 01 drive		
RIC 01 drive prepared and IMS 4.0.1 Setup performed		
Site Configuration adapted for IMS 4.0.1 (via Deployment Editor)		
First RIC computer successfully deployed with IMS 4.0.1.		
PARS IMS clients (RICs, FSUs , and Supervisor UI) successfully deployed		
Initial IMS start performed		
IMS 3 data restore done		
Download of recent dictionaries from NDSS performed		
Verification issues		
UI available on all hosts where configured		
Start/Stop frame indicates all hosts configured and ready		

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10.1.2. Installation Prerequisites

- Media as listed under materials released in section 2.1
- Plextor or Iomega CD/DVD reader for USB connection
- USB floppy drive and pre-formatted floppy disk
- Password for the "SEC Technician" IMS account and "usps admin" windows account
- Printout of current SiteConfig.ini
- Not more than 20,000 images are stored in the IMS system
- Tour change is done right before installation starts
- STP is disconnected at least two hours before upgrade

NOTE

P&DC sites formerly equipped with 3 RIC servers must have been updated to 4 RICs before starting the upgrade process to IMS 4.0.1!

Assumptions made throughout this SMO:

- The Drive Duplicator is setup to IP address 10.10.16.1
- The AFR-I 01 computer's hard disk is used as master for cloning:
IP address of AFR-I 01: 10.10.16.211

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10.2. SETUP DRIVE DUPLICATOR FOR IMS INSTALLATION

Using Phase I Hardware, see section 10.2.1, Drive duplicator phase I on page 21 (Figure 1-4).

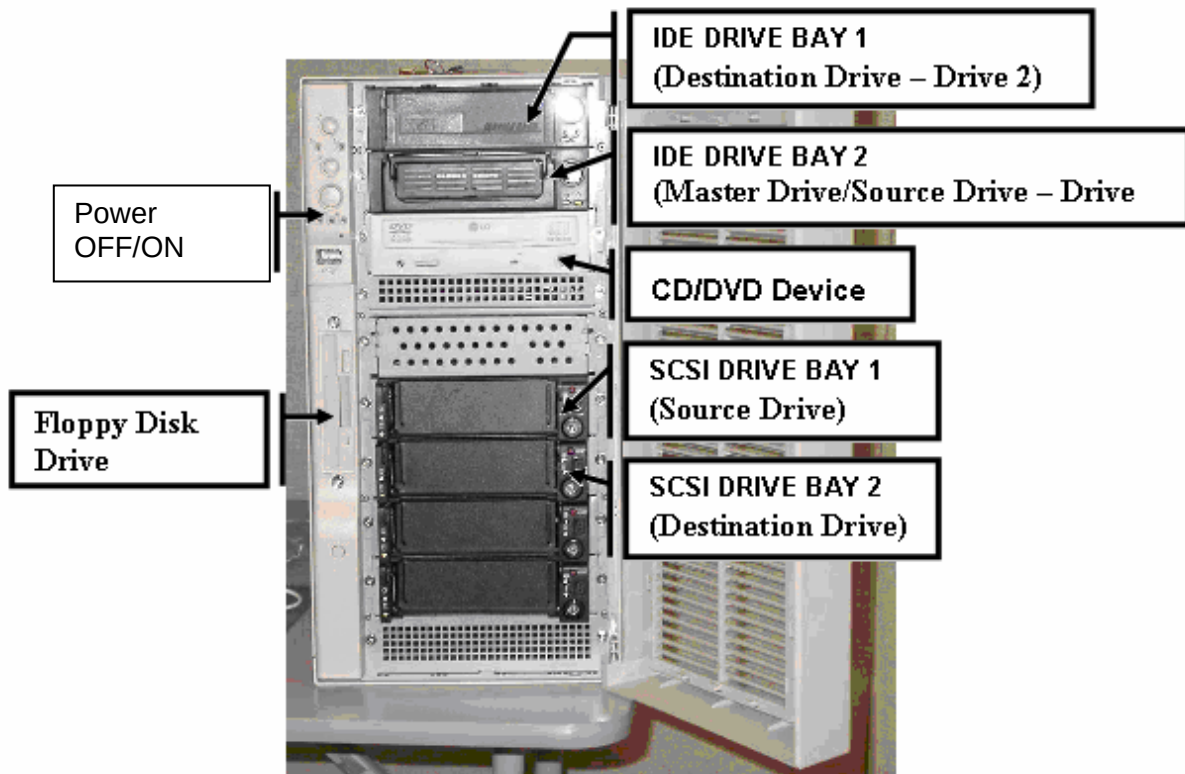


Figure 1-4. Drive Duplicator Phase I

Using Phase II Hardware, see Section 10.2.2, Drive Duplicator Phase II on page 25 (Figure 1-5).

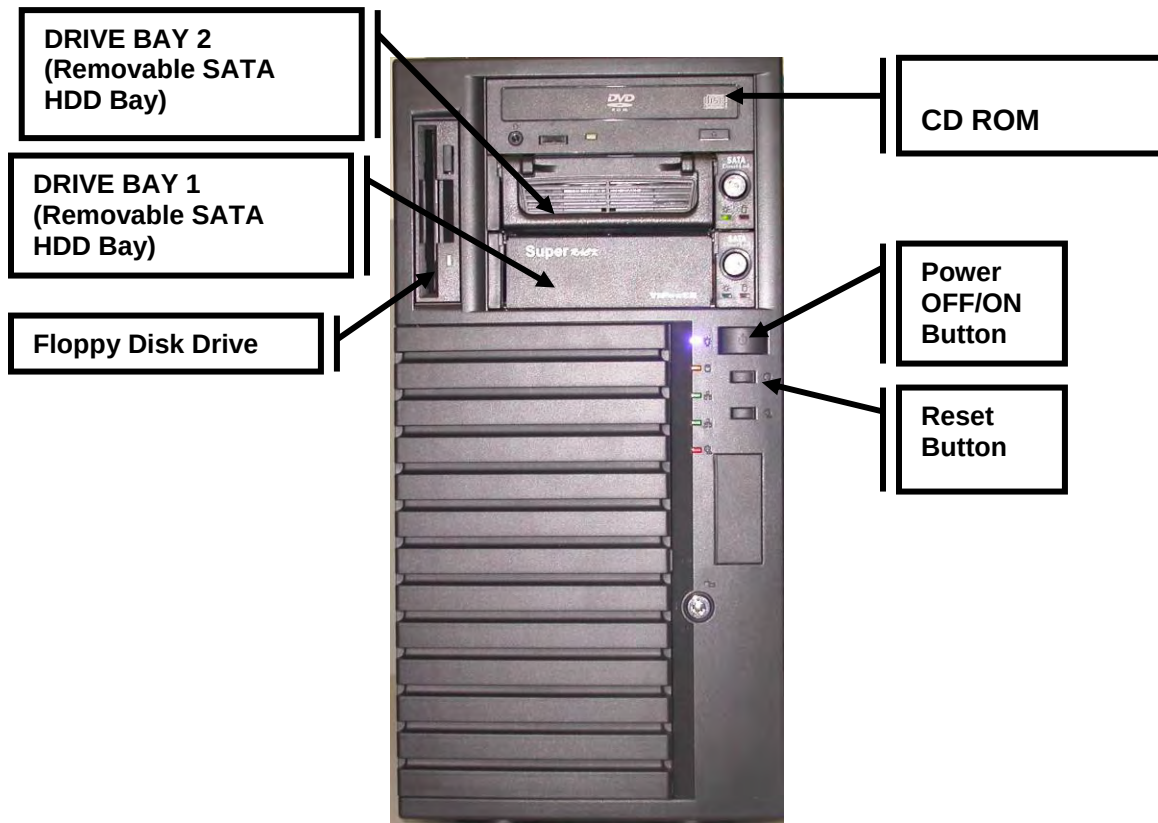


Figure 1-5. PARS Phase-II Drive Duplicator Components

10.2.1. Drive duplicator phase I

10.2.1.1 Drive Duplicator Connections

1. Verify the LAN cable is plugged in the right/lower connector (Figure 1-6).
2. Verify the IDE disk, keeping the Drive Duplicator's OS is inserted in the lower IDE drive bay (second bay from top) and is locked.



Figure 1-6. Back side of the Drive Duplicator Phase I

10.2.1.2 Verify BIOS Settings of Drive Duplicator Phase I

1. Power on the Drive Duplicator.
2. Boot the PC and enter the BIOS Setup by pressing the **F2** key, as directed by the boot-up sequence (Figure 1-7).

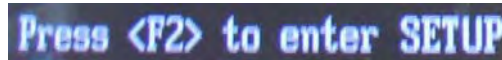


Figure 1-7. BIOS Prompt

The main "Phoenix BIOS Setup Utility" screen is displayed (Figure 1-8).

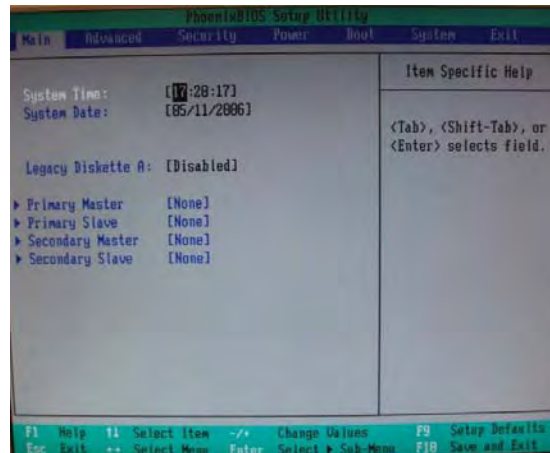


Figure 1-8. BIOS Start Screen

3. Use the arrow keys to highlight the **Advanced** menu option. Use the down arrow key to navigate to **On Board Device** (Figure 1-9).

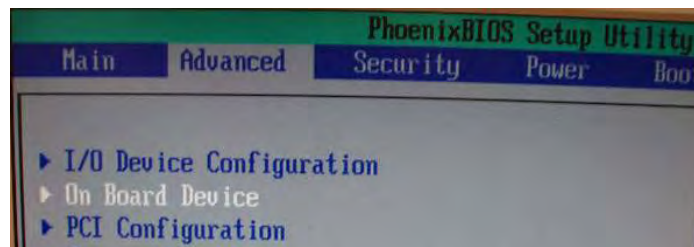


Figure 1-9. BIOS Advanced Menu

4. Press the **Enter** key.

5. Verify the "Onboard RAID" controller is **Disabled**. If enabled, change with the + key (Figure 1-10).
6. Verify that "Onboard USB" controller is **Enabled**. If disabled, change with + key.

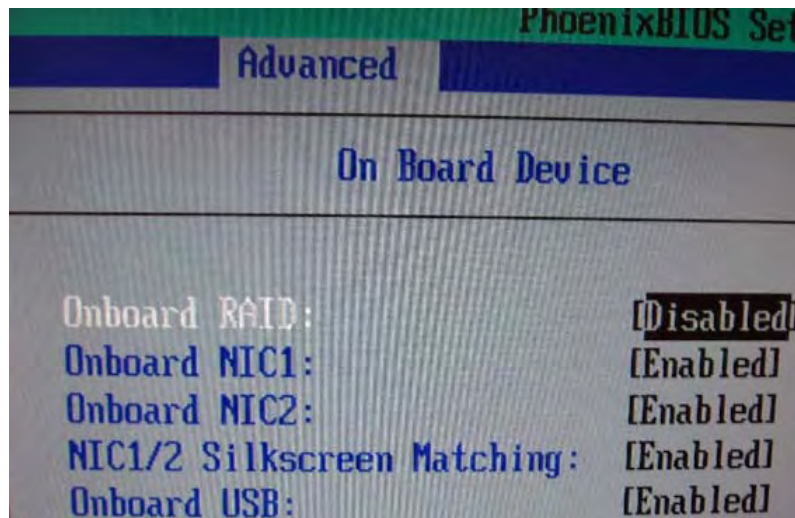


Figure 1-10. BIOS On Board Device

7. Press the **Esc** key to return to Main screen.
8. Use the arrow keys to highlight the **Boot** menu option. The "Boot" screen displays "Removable Devices", "CD-ROM Drive", "+Hard Drive", and "Network Boot" in some order (Figure 1-11).
9. If not already at the top of the list, use the arrow keys to highlight the **Removable Devices** and use the **Shift** key, together with + key to move it to the top of the list.

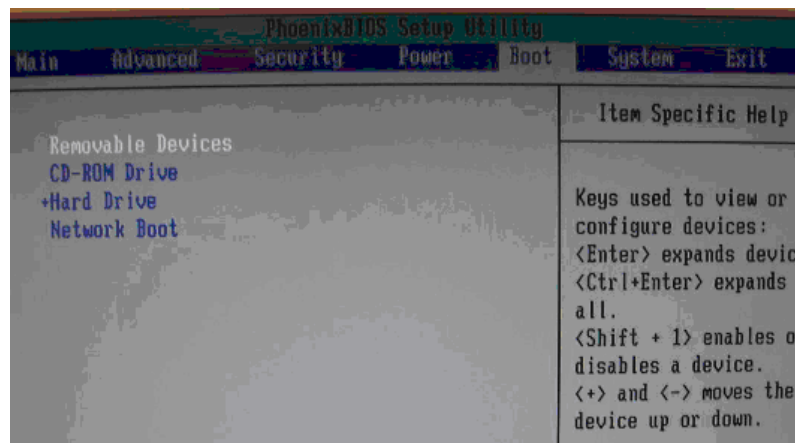


Figure 1-11. BIOS Boot Menu

10. Press **F10** to save and exit the BIOS. The "Setup Confirmation" popup window is displayed with the wording "Save configuration changes and exit now?". The **[Yes]** option should be highlighted (Figure 1-12).

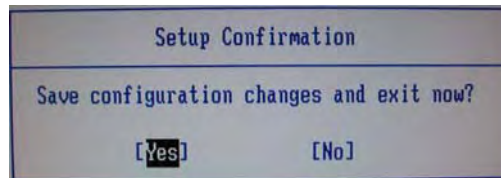


Figure 1-12. BIOS Save Setup

11. Insert the first CD with the Ghost Image of the drive duplicator, "PARS IMS 4.0.1 P&DC, PARS Drive Duplicator Install Image for Field Deployment (CD): Version XP, (Build: N/A), P/N 600-2730-000ODT Volume 1 of 2".
12. Press the **Enter** key to save the BIOS settings.
13. Proceed with section 10.2.3, Install OS Image on Drive Duplicator from Ghost Image on page 27.

10.2.2. Drive duplicator phase II

10.2.2.1 Drive Duplicator Connections

1. Verify that LAN cable is plugged in the upper LAN connector (Figure 1-13).
2. Verify that no disc is inserted in the drive bay below the CD drawer.



Figure 1-13. Back Side of the Drive Duplicator Phase II

10.2.2.2 Verify BIOS Settings of Drive Duplicator Phase II

The computer must be configured to boot from the CD drive (BIOS setup).

The configuration can be adapted by completing the following steps:

1. Boot the PC and enter the BIOS by pressing the **F2** key as directed by the boot-up sequence. The main "Phoenix BIOS Setup Utility" screen is displayed (Figure 1-14).

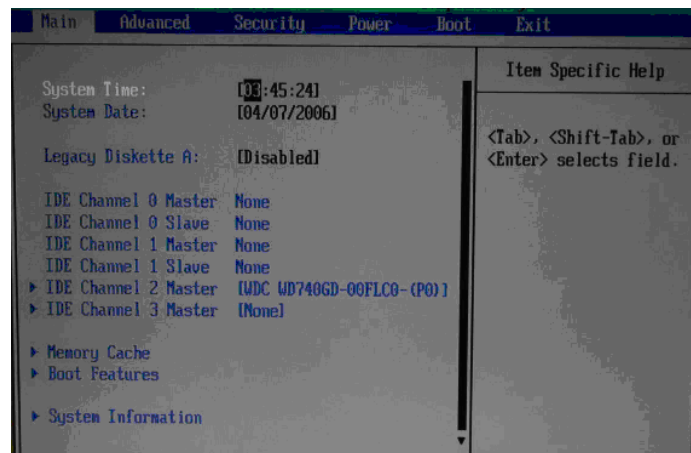


Figure 1-14. Setup

2. Use the arrow keys to highlight the **Advanced** menu option and verify that **SATA RAID** is **Disabled**. If not, select item and press **+** to change (Figure 1-15).

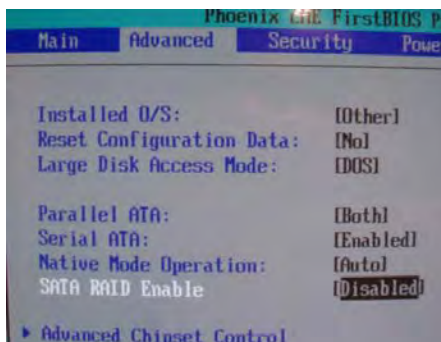


Figure 1-15. Advanced Options

- Verify in the same menu that Legacy USB Support is **Enabled**. If not, select **Legacy USB Support** and press **+** to change (Figure 1-16).

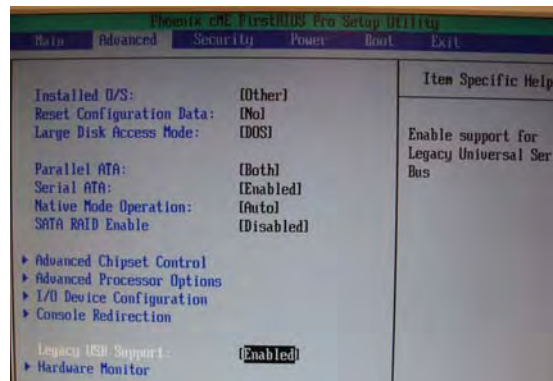


Figure 1-16. Verify Legacy USB

- Press **Esc** to return to the main screen.
- Select **Boot**.
- Use the arrow keys to highlight the **Boot** menu option. The "Boot" screen displays "Removable Devices", "CD-ROM Drive", "+Hard Drive", and "Network Boot" in some order (Figure 1-17).
- If not already at the top of the list, use the arrow keys to highlight **Removable Devices** and use the **Shift** key together with **+** key to move it to the top of the list.

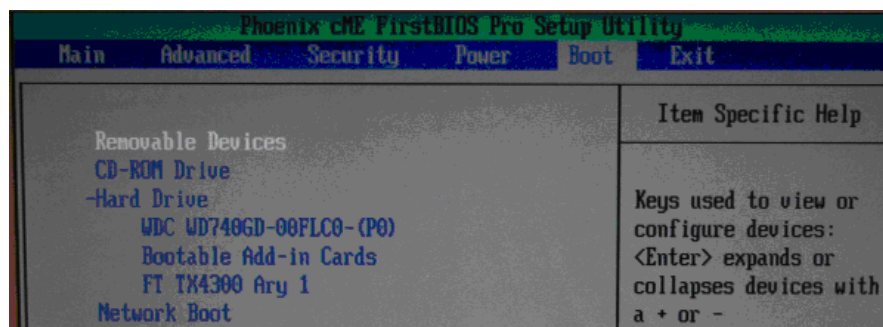


Figure 1-17. Boot Configuration Phase II Hardware

- Press **F10** to save and exit the BIOS. The "Setup Confirmation" popup window displays "Save configuration changes and exit now?" The **[Yes]** option should be highlighted (Figure 1-18).
- Insert the first CD with the Ghost image for the Drive Duplicator Phase II, "PARS IMS 4.0.1 P&DC, PARS Phase II Drive Duplicator Installation Kit (CD): Version XP, (Build: N/A), P/N 66.6015.091-01.ODT Volume 1 of 2" **Error! Reference source not found.**
- Press **Enter** to save the BIOS changes and to boot the Drive Duplicator.

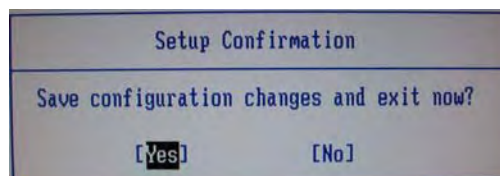


Figure 1-18. BIOS save Setup

10.2.3. Install OS Image on Drive Duplicator from Ghost Image

After BIOS verification, Ghost CD #1 is loaded and the computer starts loading from that CD.

After a couple of seconds, ghost start dialog is displayed (Figure 1-19).

1. If "Press any key to continue" message is presented in Command Prompt window, press any key to continue.
2. If a "License agreement" warning dialog is displayed, click on **OK** to continue.

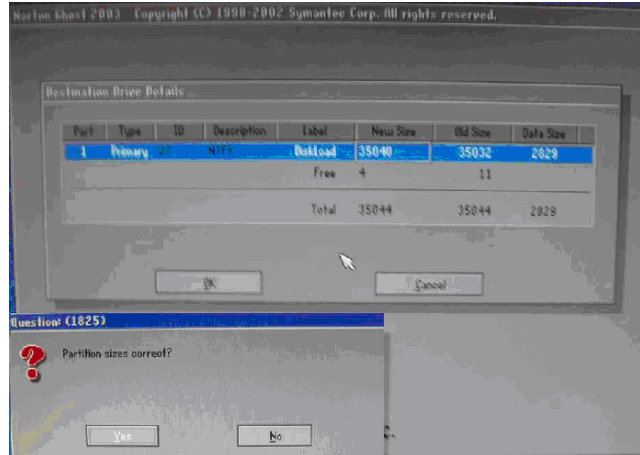


Figure 1-19. Ghost Start Dialog Image (See note below)

NOTE

Phase I: disk size 34 GB. Phase II: disk size 74 GB.

3. Click **Yes** to confirm the correct partition size.

A confirmation window displays wording such as "Proceed with disk restore? Destination drive will be permanently overwritten" (Figure 1-20).

4. Click **Yes** to start the copy process. The disk activity light will flash on the CD/DVD drive and the "Progress Indicator" on the "Norton Ghost" screen will start displaying the progress.



Figure 1-20. Proceed with Restore

5. When the "Span Volume" popup window is displayed (Figure 1-21), remove CD #1 from the CD/DVD drive and insert PARS IMS 4.0.1 P&DC, PARS Phase II Drive Duplicator Installation Kit (CD): Version XP, (Build: N/A), P/N 66.6015.091-02.ODT Volume 2 of 2 and close the drawer
 - PARS IMS 4.0.1 P&DC, PARS Drive Duplicator Install Image for Field Deployment (CD): Version XP, (Build: N/A), P/N 600-2730-000ODT Volume 2 of 2
 - PARS IMS 4.0.1 P&DC, PARS Phase II Drive Duplicator Installation Kit (CD): Version XP, (Build: N/A), P/N 66.6015.091-02.ODT Volume 2 of 2

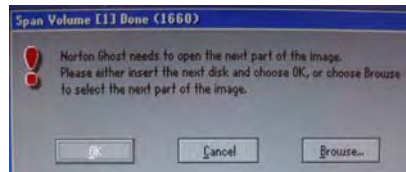


Figure 1-21. Span Volume

6. Click on **OK** to continue with ghost CD #2. A "Clone Complete" popup window is displayed when the restore is finished (Figure 1-22).

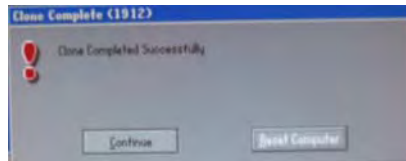


Figure 1-22. Ghost Clone Complete dialog

7. Open CD/DVD drive and remove the CD.
8. Click **Reset Computer** and the computer will reboot.

Windows will start and a Login screen is displayed (Figure 1-23).

9. Select the **Siemens** account to log in.

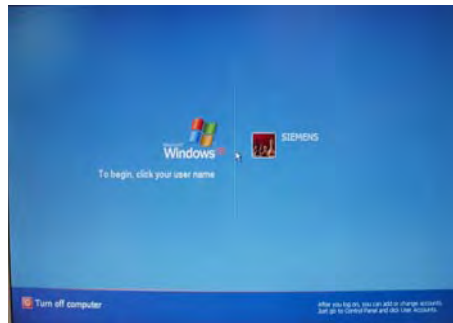


Figure 1-23. Login User Siemens

10.2.4. OS Configuration

NOTE

Throughout this document, the labeling for a disk may vary e.g. "Local Drive or Local Disk". This depends on the underlying OS image.

1. A few minutes after reboot, a 'System Settings Change' window pops up, indicating new hardware is found (Figure 1-24).
2. Select **No**. The computer will be rebooted later. Start with the OS configuration.



Figure 1-24. New devices installed - reboot

10.2.4.1 Configure Explorer for detail view

1. Open Windows Explorer by right clicking on **Start** and selecting **Explore**.
2. Click on the **Views** icon in the taskbar. The "View" pull-down menu is displayed. Select **Details** (Figure 1-25).

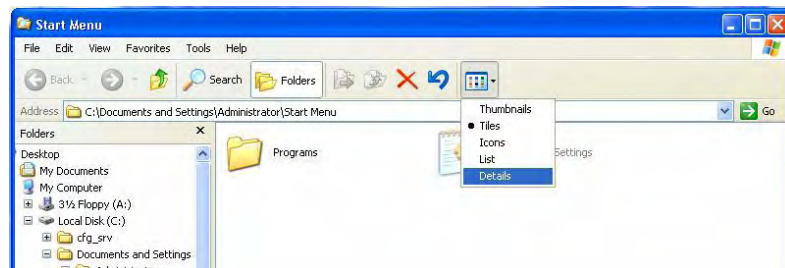


Figure 1-25. Explorer Window - Select View Details

3. To fix selected view, select **Tools** from the menu bar. The "Tools" menu is displayed (Figure 1-26).
4. Select **Folder Options....**

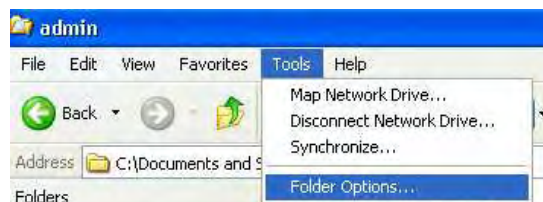


Figure 1-26. Menu – Tools - Folder Options

The “Folder Options” popup is displayed (Figure 1-27).

5. Select **View** tab.
6. In the “Advanced settings” section, verify that “Hide Extensions for known file types” is not selected.
7. Select **Apply** to All Folders.

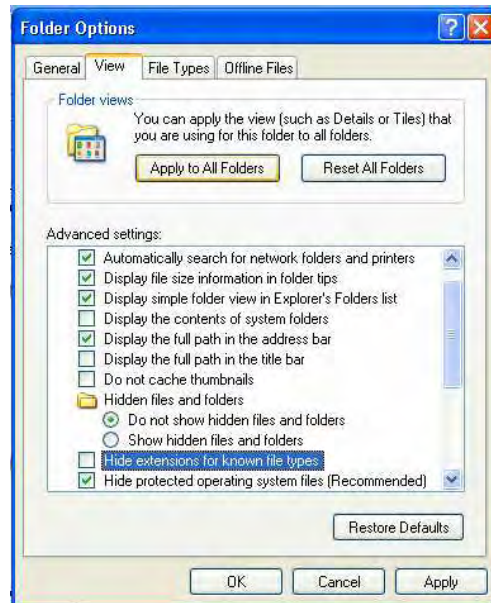


Figure 1-27. Folder Options Windows

A “Folder views” popup is displayed (Figure 1-28).

8. Select **Yes** to continue.



Figure 1-28. Folder View Confirmation

9. Close the “Folder Options” window by clicking on **OK**.
10. Close the “Explorer - Start Menu” window by clicking on **X** in upper right corner of window.

10.2.4.2 Network Configuration

1. On the Windows taskbar, select **Start** and **Control Panel** (Figure 1-29).



Figure 1-29. Menu Control Panel

The "Control Panel" window is displayed (Figure 1-30).

2. Double click on the **Network Connections** icon.

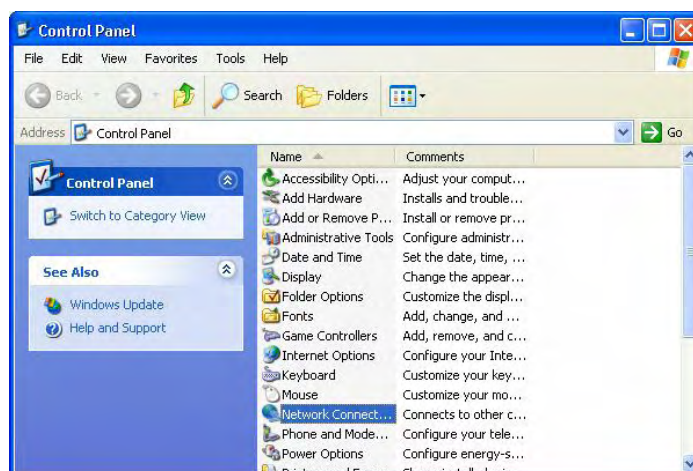


Figure 1-30. Control Panel - Open Network Connections

The "Network Connections" window is displayed (Figure 1-31).

3. Highlight **Local Area Connection** to change label.

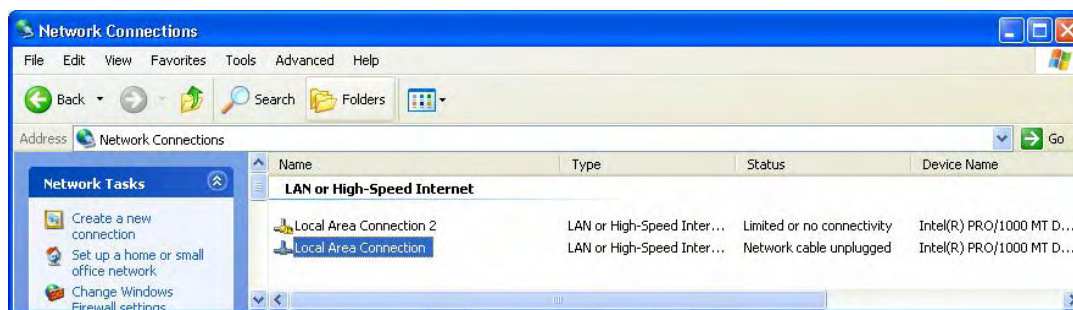


Figure 1-31. Network Connections window

4. Select **File** and **Rename** on the menu bar (Figure 1-32).

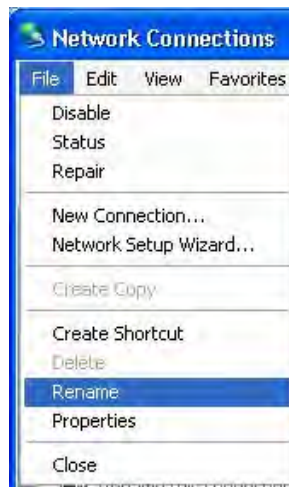


Figure 1-32. Network Connections Menu Bar

The cursor will be flashing at the right end of the "Local Area Connection" name field.

5. Type in the new name **PARS_MNS_(space)NET** (Figure 1-33).
 6. Press the **Enter** key.

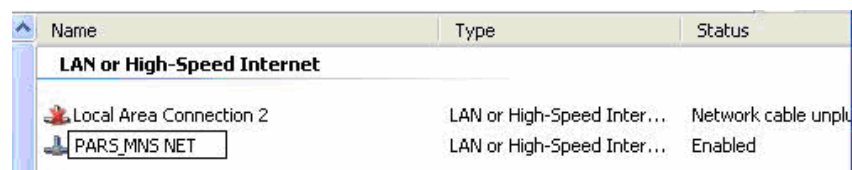


Figure 1-33. Rename Network Connection

7. Select **File** and **Properties** on the "Network Connections" menu bar (Figure 1-34).

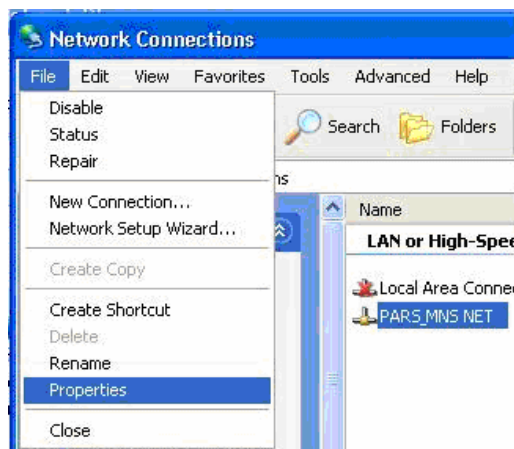


Figure 1-34. Select PARS_MNS NET Properties

The PARS_MNS NET Properties window is displayed (Figure 1-35).

8. Click on **Internet Protocol (TCP/IP)** to highlight it and choose **Properties**.

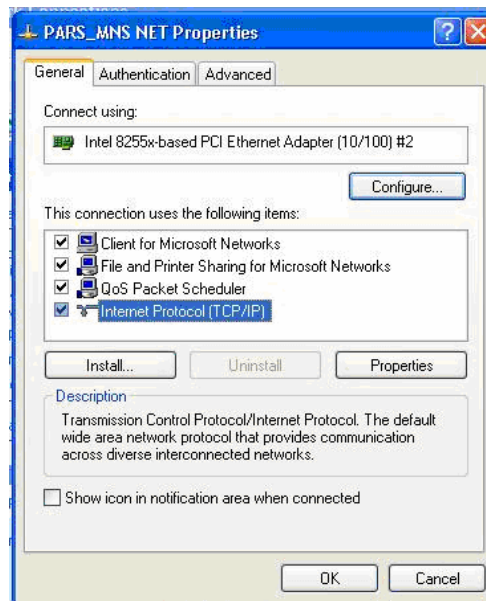


Figure 1-35. PARS_MNS NET Properties Window

The "Internet Protocol (TCP/IP) Properties" popup is displayed (Figure 1-36).

9. Click on the radio button in front of **Use the following IP address:** and position the cursor in the field for IP address at far left.

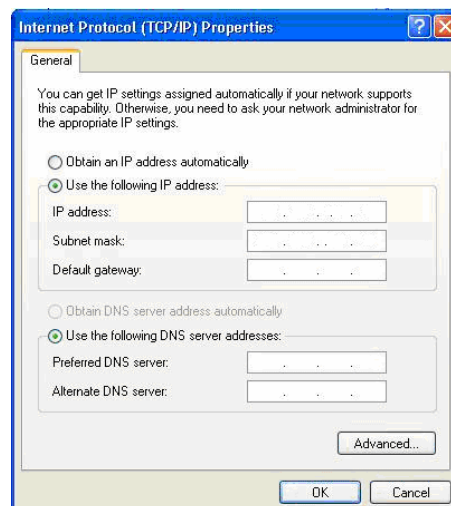


Figure 1-36. TCP/IP Properties

10. Insert the Drive Duplicator's IP address **10.10.16.1** (Figure 1-37).
11. Press the **Tab** key. The cursor will move to the left end of the "Subnet mask:" field and 255 will be displayed as the first octet.
12. Insert **255.255.255.0** in the subnet mask.

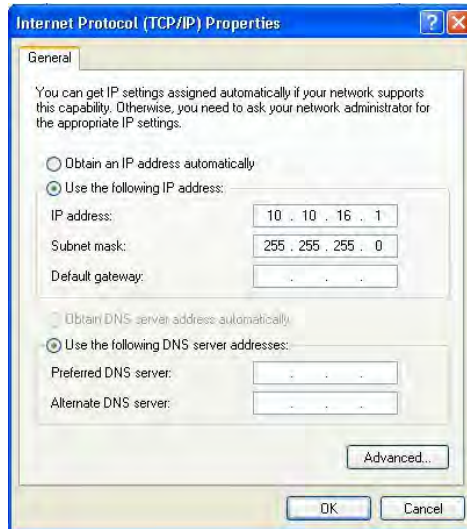


Figure 1-37. PARS_MNS NET Internet Protocol Properties Window

13. Click on **OK**. The "Internet Protocol (TCP/IP) Properties" popup is displayed.
14. Click on **Close**. The "PARS_MNS NET Properties" popup will close.
15. To return to the control panel, close the "Network Connections" window by clicking on **Back**.

10.2.4.3 Creating User 'usps admin'

1. In the active "**Control Panel**" window (Figure 1-38), double-click on **User Accounts**.

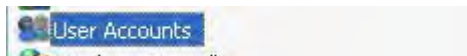


Figure 1-38. Control Panel – User Accounts

The 'User Accounts' window is displayed (Figure 1-39 – Phase I and Figure 1-40 – Phase II).

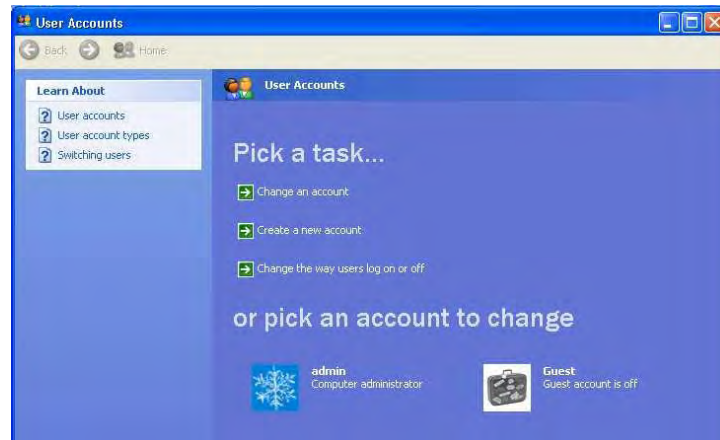


Figure 1-39. User Accounts I Drive Duplicator Phase I

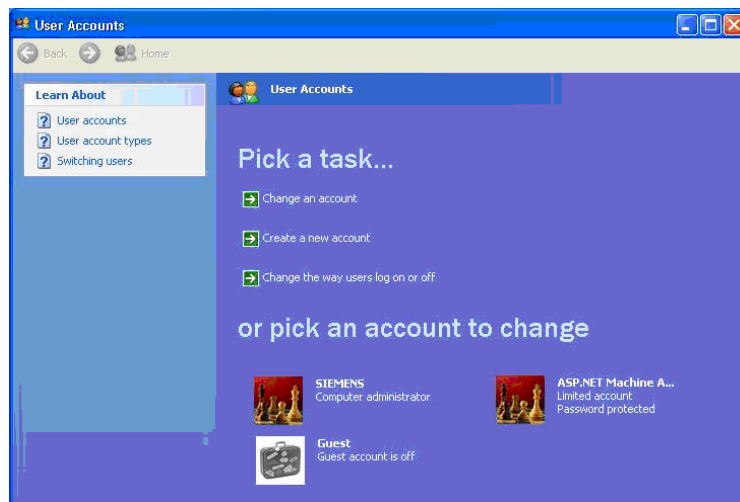


Figure 1-40. User Accounts I Drive Duplicator Phase II

NOTE

DD Phase I: user login is **admin** (Figure 1-39).

DD Phase II: user login is **SIEMENS** (Figure 1-40).

2. Click on **Create a new account**.

A “User Accounts” window is displayed (Figure 1-41).

3. Enter **usps admin** and click **Next >**.



Figure 1-41. Name the New Account

A “Pick an account type” dialog is displayed (Figure 1-42).

4. Activate radio button for Computer administrator and click on **Create Account**.

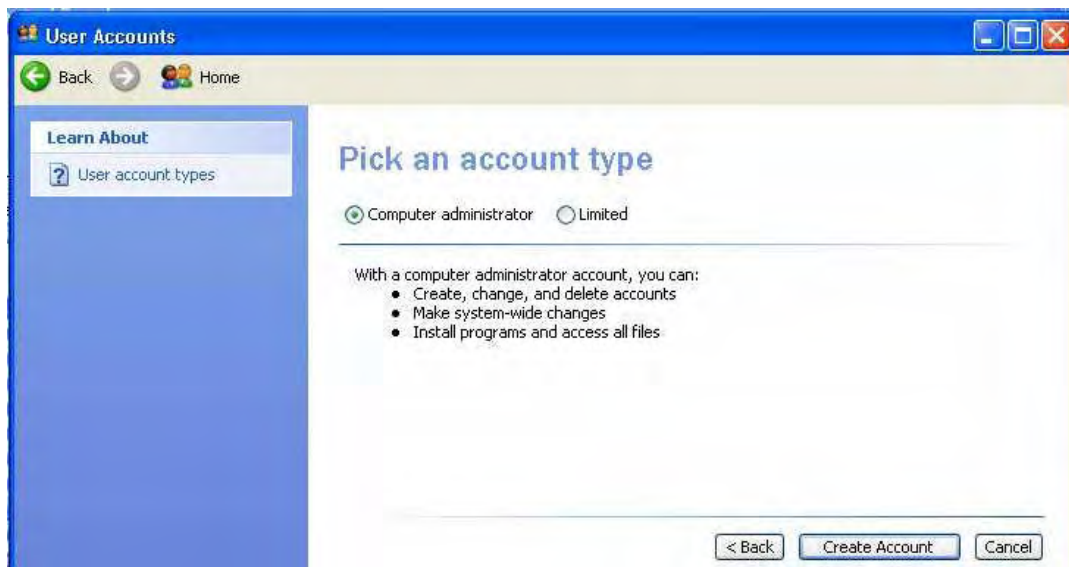


Figure 1-42. Pick an Account Type

The user account window is displayed again (Figure 1-43 – Phase I and Figure 1-44 – Phase II).

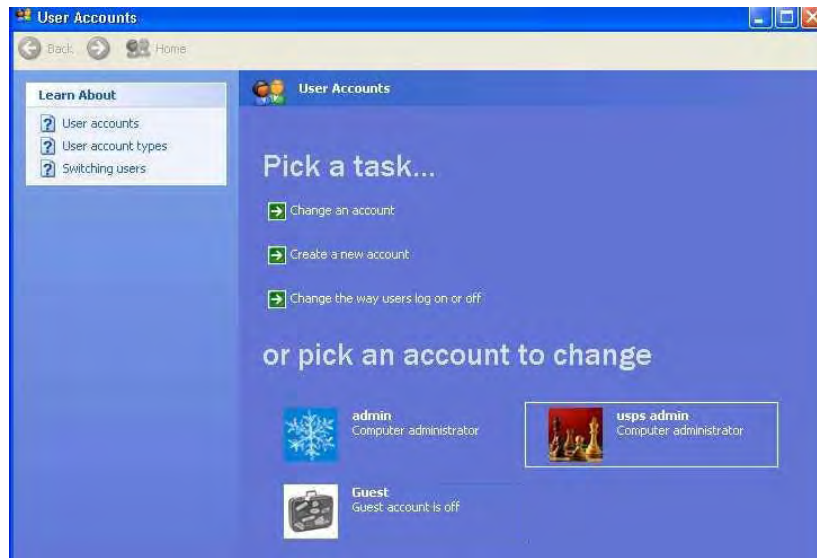


Figure 1-43. User Accounts II Drive Duplicator Phase I

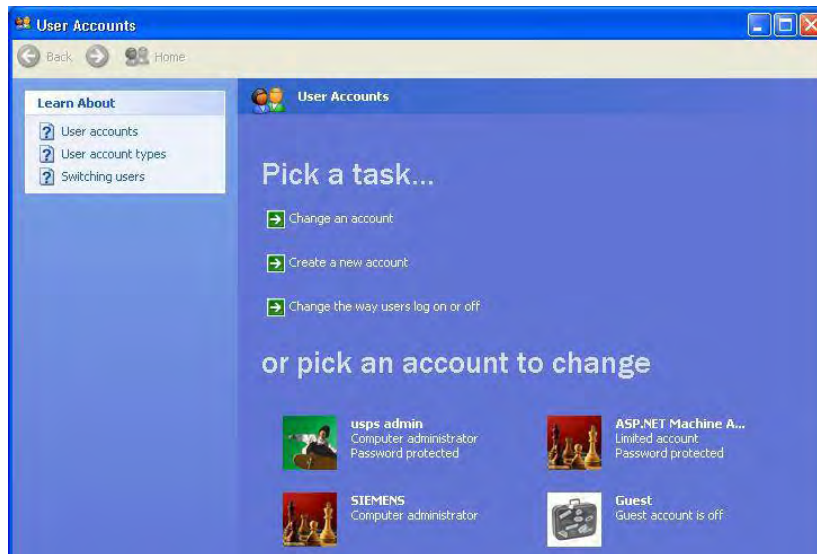


Figure 1-44. User Accounts II Drive Duplicator Phase II

NOTE

DD Phase I: user login is **admin** (Figure 1-43).

DD Phase II: user login is **SIEMENS** (Figure 1-44).

5. To create a password for the new account 'usps admin', click on **usps admin**.

The "User Accounts" window for user 'usps admin' is displayed (Figure 1-45).

6. Click on **Create a password**.

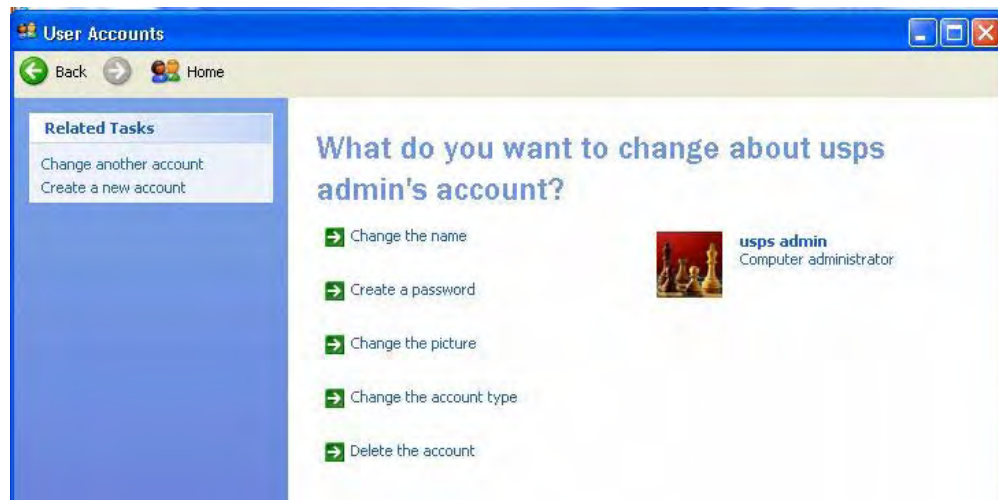


Figure 1-45. User Accounts – User usps admin

The "Create a password" dialog is displayed (Figure 1-46).

7. Enter password for 'usps admin' received from the MTSC in the first and the second line and click on **Create Password**.

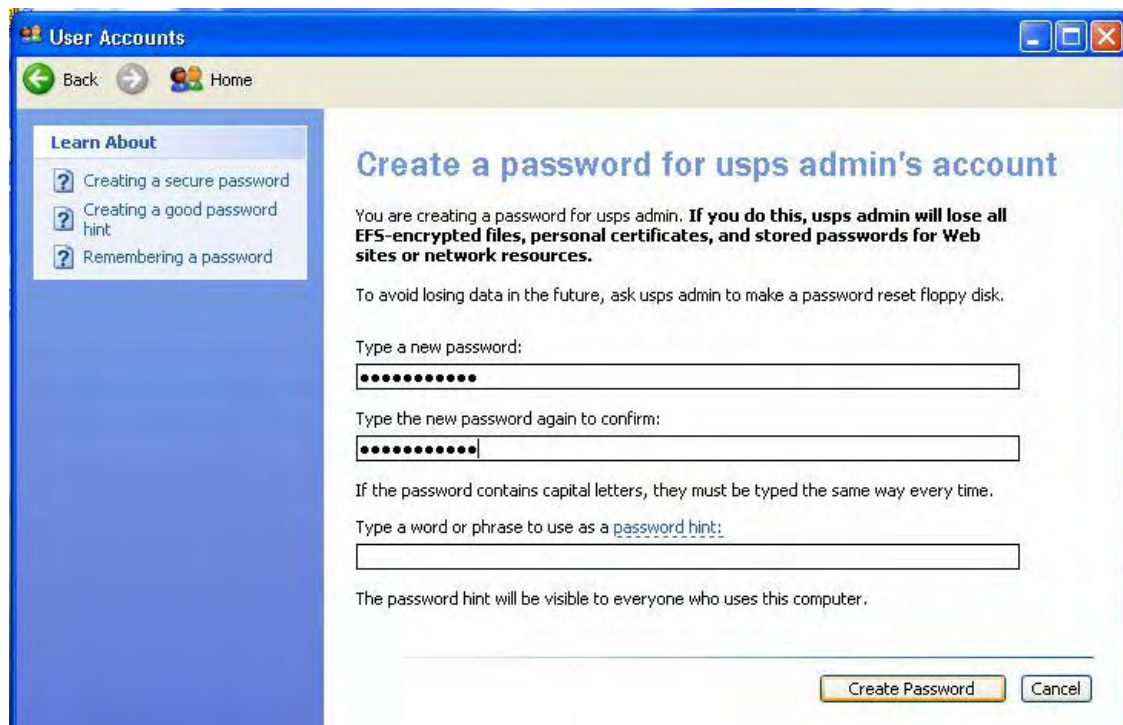


Figure 1-46. User Accounts – Create a Password for User usps admin's Account

The user specific account window is displayed again (Figure 1-47).

8. Click on X to close window.



Figure 1-47. User Accounts II

10.2.4.4 Change Network Access Policy

1. Activate the “Control Panel” window if not already active.
2. Double-click on **Administrative Tools** (Figure 1-48).

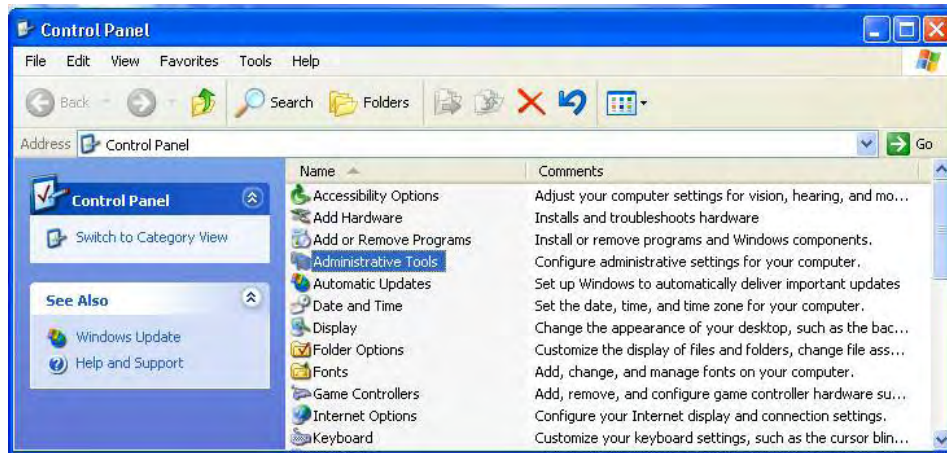


Figure 1-48. Control Panel Administrative Tools

The “Administrative Tools” window is displayed (Figure 1-49).

3. Double click on **Local Security Policy**.



Figure 1-49. Administrative Tools Window

The “Local Security Settings” window is displayed (Figure 1-50).

4. Double click on **Local Policies** to expand the folder and select **Security Options**.
5. Locate **Network access: Sharing and security model for local accounts** in the right pane and double click on it.

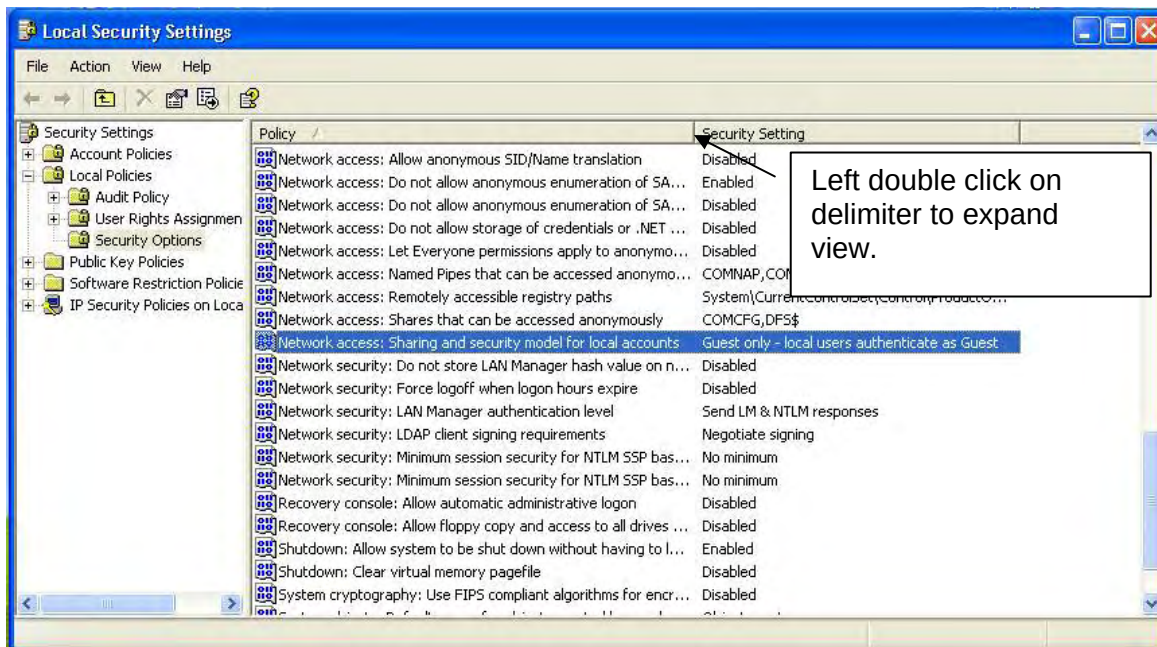


Figure 1-50. Local Security Policy Window

The “Network Access” window is displayed (Figure 1-51).

6. Select **Classic – local users authenticate as themselves** in the drop down list.
7. Click on **OK** to close the “Network Access” window.

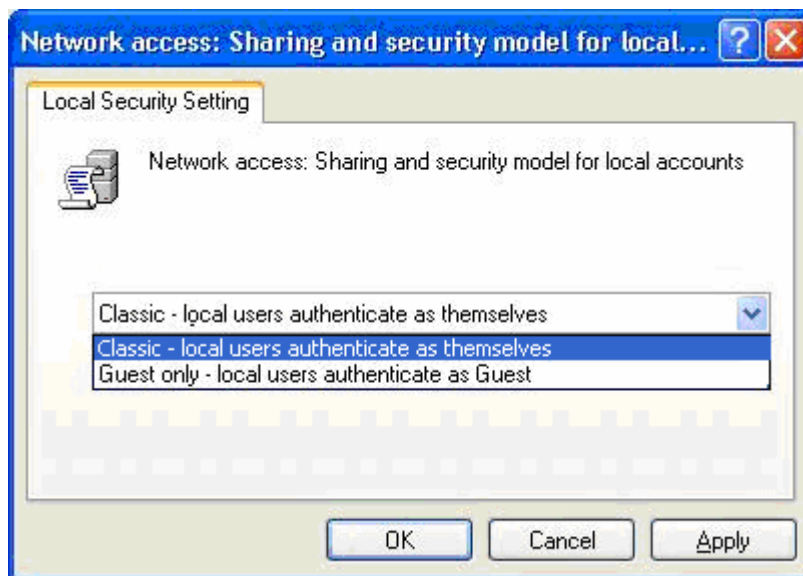


Figure 1-51. Select Network Access Model

8. Click on **X** to close “Local Security Settings” windows.

9. Go back to the active “Control Panel” window by clicking the **Back** button.

10.2.4.5 Change Workgroup

1. Double click on the **System** icon in the active “Control Panel” window (Figure 1-52).



Figure 1-52. Control Panel - System

The “System Properties” window is displayed (Figure 1-53).

2. Select the **Computer Name** tab.

3. Click on **Change**.

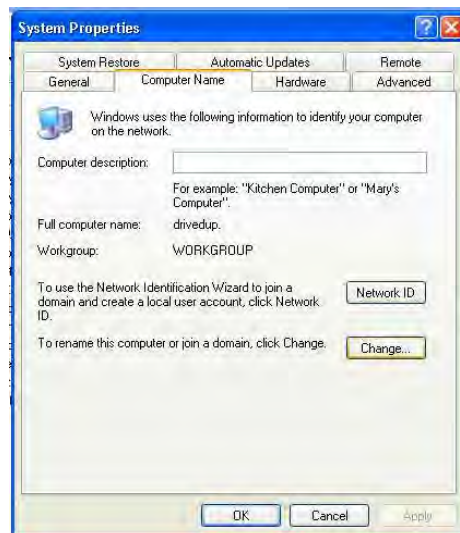


Figure 1-53. System Properties I

The “Computer Name Changes” window is displayed (Figure 1-54).

4. Modify the Computer name as required, e.g. enter **drivedup**.

5. Activate the radio button for **Workgroup**, enter **PARS**, and click **OK**.



Figure 1-54. Computer Name Changes

A 'Computer Name Changes' confirmation dialog is displayed (Figure 1-55).

6. Click on **OK**.



Figure 1-55. Computer Name Changes Confirmation Dialog I

A second 'Computer Name Changes' confirmation dialog is displayed (Figure 1-56).

7. Click on **OK**.



Figure 1-56. Computer Name Changes Confirmation Dialog II

The System Properties window is displayed again (Figure 1-57).

8. Click on **OK**.



Figure 1-57. System Properties II

A “System Settings Change” is displayed (Figure 1-58).

9. Click on **Yes**. The computer reboots and the login screen is displayed (Figure 1-59).



Figure 1-58. System Settings Change

NOTE

DD Phase I: user login is **admin** (see Figure 1-59).

DD Phase II: user login is **SIEMENS**.

10. Click on **usps admin** icon.



Figure 1-59. Windows Logon Screen (See note below)

The password prompt is displayed (Figure 1-60).

11. Enter password for 'usps admin' and click on **green button** with white arrow to log in.

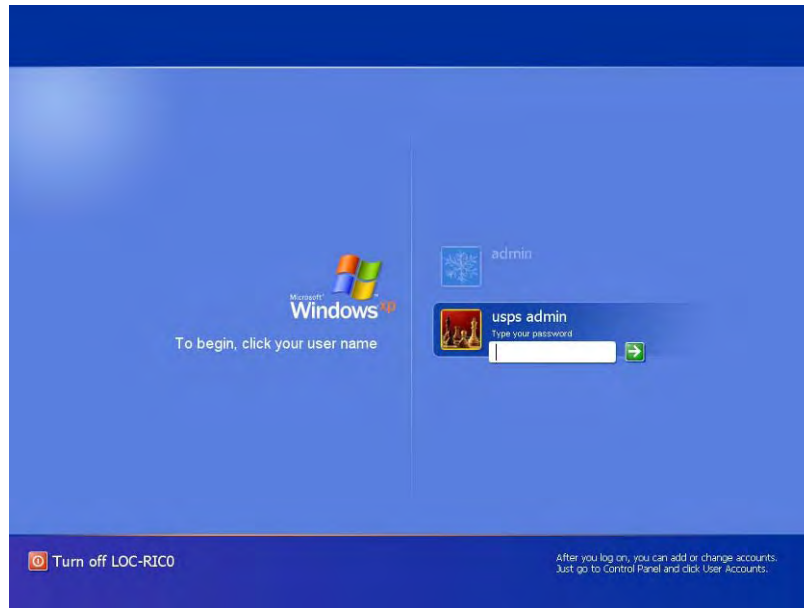


Figure 1-60. Windows Logon Screen – Enter password

12. If the “Start” menu is opened, press the **Esc** key to close it.

10.2.4.6 Setting Explorer View

1. Open Windows Explorer by right clicking on **Start** and selecting **Explore**.
2. Click once on the **View** icon on the "Windows Explorer" menu bar. The "View" pull-down menu is displayed. Select **Details** (Figure 1-61).

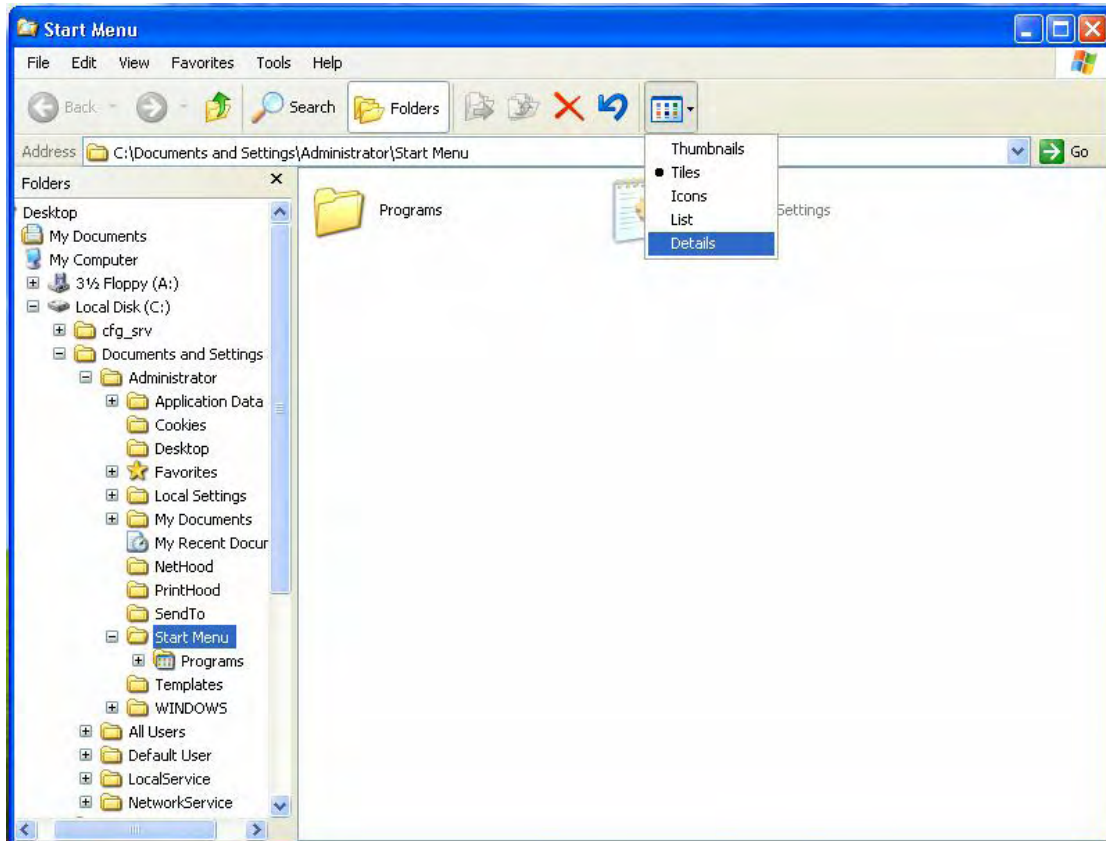


Figure 1-61. Explorer Window Select View Details

3. To save the selected view, select **Tools** from the menu bar. The "Tools" menu pops up (Figure 1-62).
4. Select **Folder Options...**

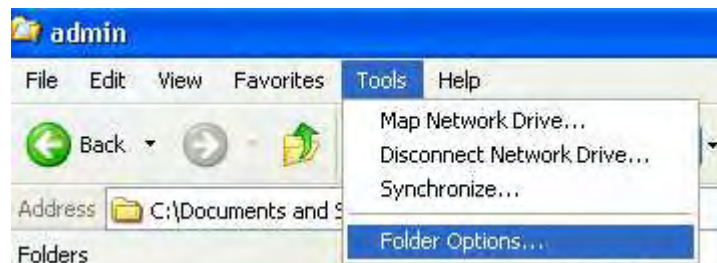


Figure 1-62. Menu - Tools - Folder Options

The “Folder Options” popup is displayed (Figure 1-63).

5. Select **View** tab.
6. In the “Advanced settings” section, verify that **Hide Extensions for known file types** is not checked.
7. Click on **Apply to All Folders**.

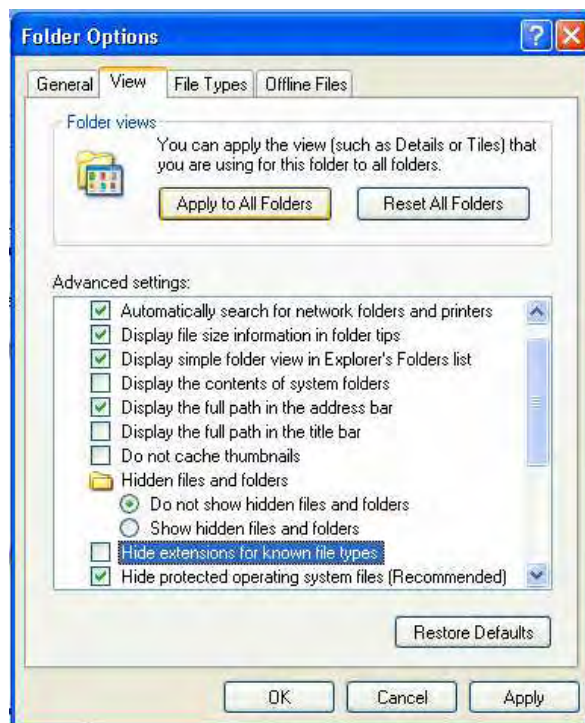


Figure 1-63. Folder Options Windows

A “Folder views” popup is displayed (Figure 1-64).

8. Click on **Yes** to continue.

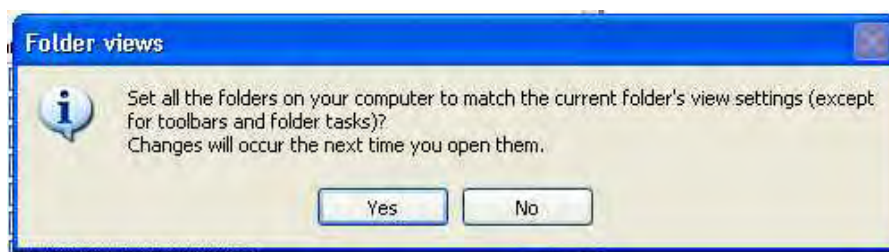


Figure 1-64. Folder View Confirmation

9. Close the “Folder Options” window by clicking on **OK**.
10. Close the “Explorer - Start Menu” window by clicking on **X** in upper right corner of window.

10.2.4.7 Setting Date and Time / Time zone

1. On the Windows taskbar select **Start** and **Control Panel** to open the “Control Panel” window (Figure 1-65).
2. Select **Switch to Classic View** from the left side of the screen.

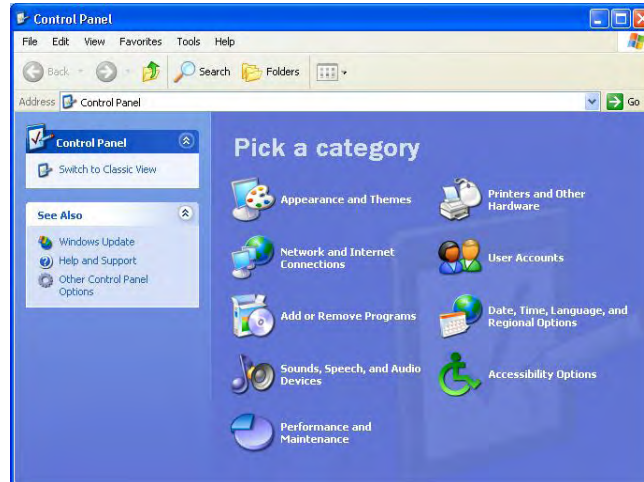


Figure 1-65. Change to Classic View

3. In the “Control Panel” window, double click on **Date and Time** icon (Figure 1-66).

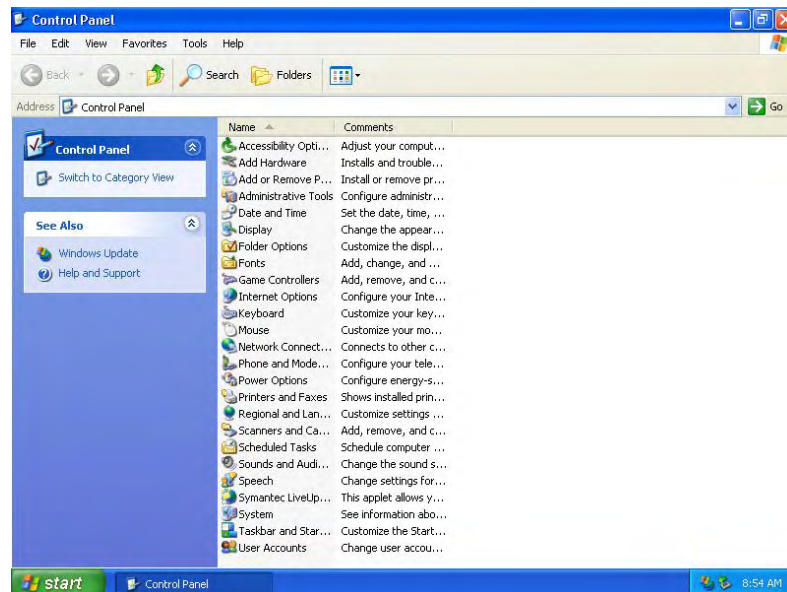


Figure 1-66. Control Panel Window Classic Style

The "Date and Time Properties" popup is displayed (Figure 1-67).

4. Click on **Time Zone** tab.

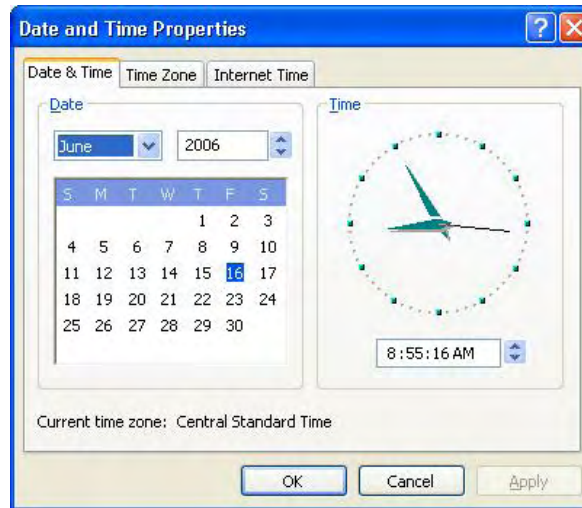


Figure 1-67. Date and Time Properties

The Date and Time Setting dialog screen is displayed (Figure 1-68).

5. Click on down arrow (▼) to display the time zone list.
6. Select the time zone for the area where the computer is located.
7. Click on **Apply**. The Apply button is not available if you have not changed the time zone.



Figure 1-68. Date and Time Setting Dialog

8. Click on the **Internet Time** tab (Figure 1-69).
9. Uncheck checkbox for “**Automatically synchronize with an Internet time server**”.
10. Click on **Apply** if you have unchecked the box.
11. Click on **Date & Time** tab.

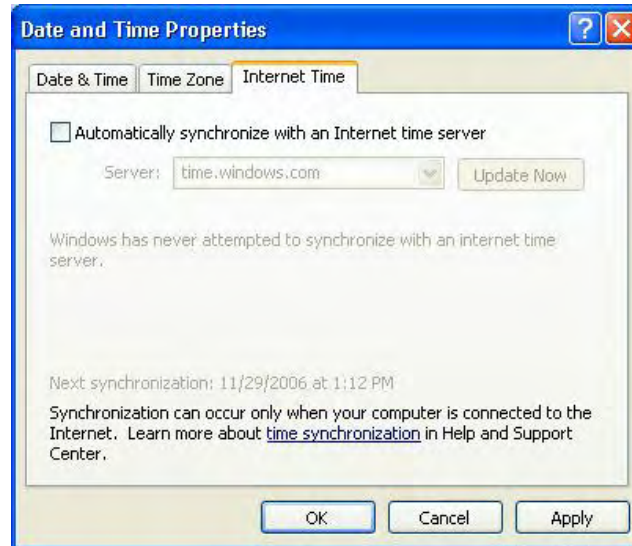


Figure 1-69. Verify Internet Time Is Not checked

12. Verify current time and date. If necessary, adapt them by highlighting each field within the time field (i.e. hours, minutes, and seconds). Using arrow keys, change the digits forward or backwards.
13. Click on **OK**.
14. Close the “Control Panel” window by clicking on **X** in the upper right corner of window.

10.2.5. IMS Preparation

NOTE

If the CD drive fails while performing the following preparation steps, attach an external USB CD/DVD drive and call the MTSC for a spare part.

1. Open Windows Explorer.
2. Click on - at the beginning of 'Documents and Settings' to collapse folders. Select **Local Disk(C:)** (Figure 1-70).

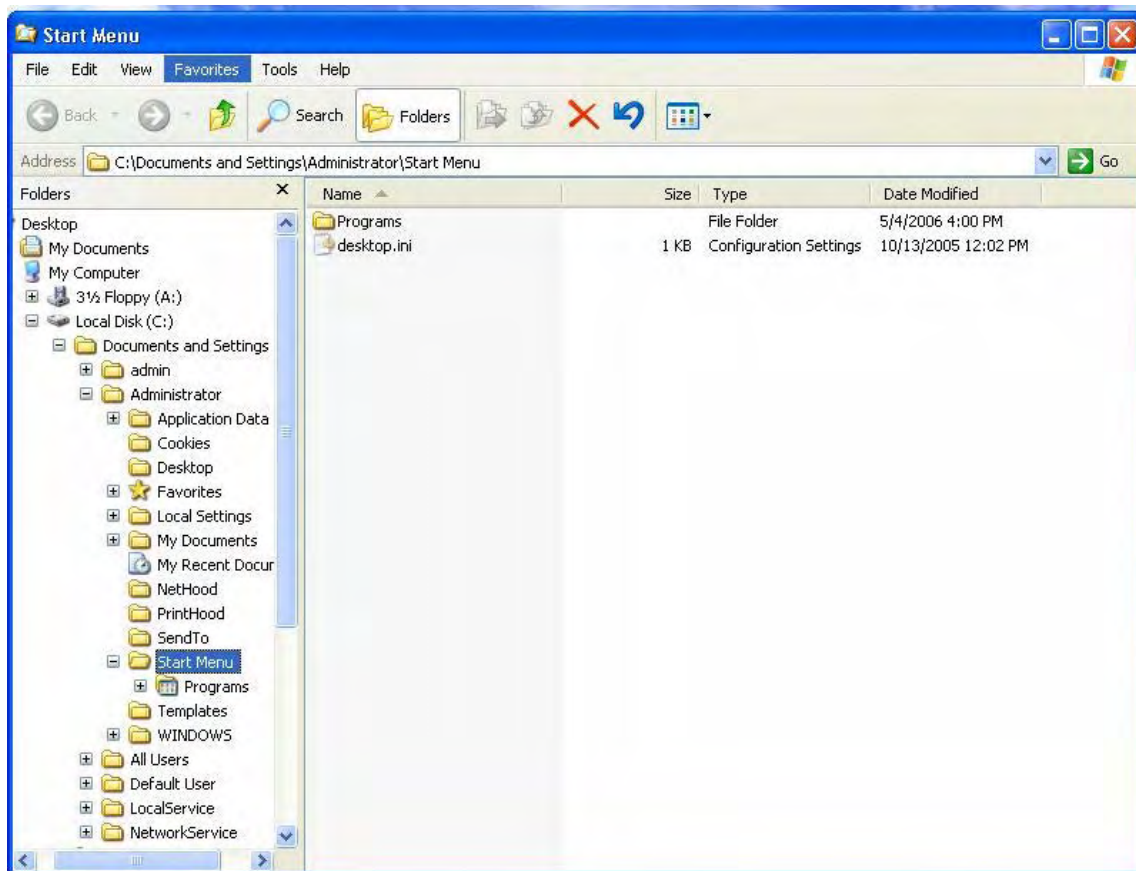


Figure 1-70. Explorer Window

3. If a message is displayed saying, "These files are hidden", click on **Show the contents of this folder** (Figure 1-71).

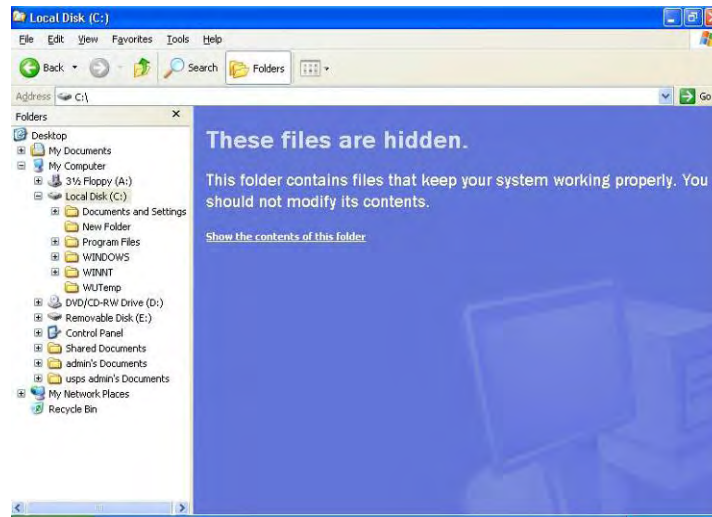


Figure 1-71. These Files Are Hidden

NOTE

If a copying process fails, it may be necessary to delete any files in the created folder and then repeat the appropriate steps.

- 10.2.5.1 Create folder for IMS setup software and copy the contents of the IMS setup CD to Drive Duplicator drive C:

1. Select **File**, **New**, and **Folder** on the "Windows Explorer" menu bar (Figure 1-72).

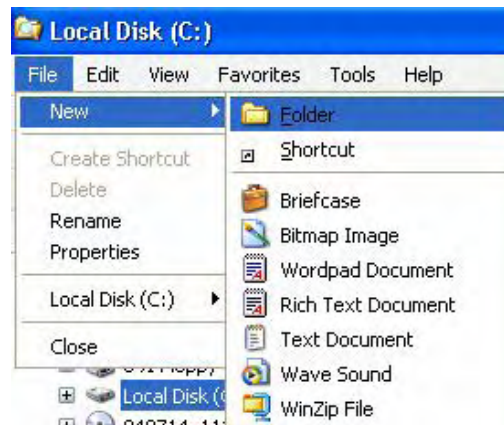


Figure 1-72 Explorer Window – File, New, and Folder

2. In the right part of the explorer window a 'New Folder' will be created. Enter **IMS_Setup** and press **Enter** (Figure 1-73).

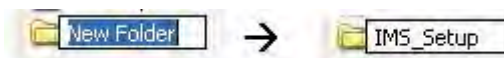


Figure 1-73. Explorer Window – Create New Folder

3. Open CD drive and insert "PARS IMS 4.0.1 P&DC, PARS IMS/AFR Software Installation Kit (CD): Version 4.01, (Build: 32.51), P/N 600-2553-000ODT, Volume 1 of 1".
4. If an additional explorer window pops up, click on **X** to close this window.
5. In the Explorer window's left pane, locate the CD drive, click on it and select **Edit** and **Select All** on the menu bar (Figure 1-74).

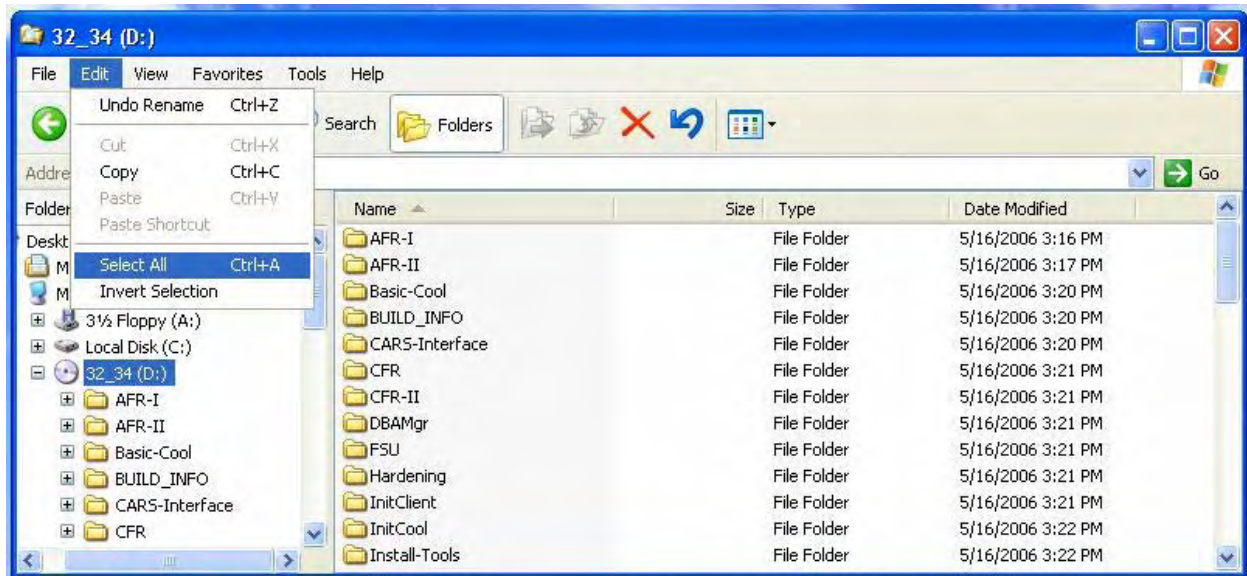


Figure 1-74. Explorer Window – Select All Folders

All entries in the right part of explorer windows will be marked.

6. On the menu bar, select **Edit** and **Copy** (Figure 1-75).

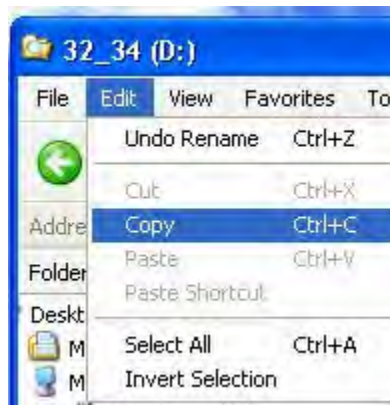


Figure 1-75. Explorer Window – Copy All Folders

7. Locate the folder **C:\IMS_Setup** and click on it (Figure 1-76).
8. If the folder is not visible, click on the + sign at left hand of "Local Disk (C:)".
9. Select **Edit** and **Paste** on the menu bar.

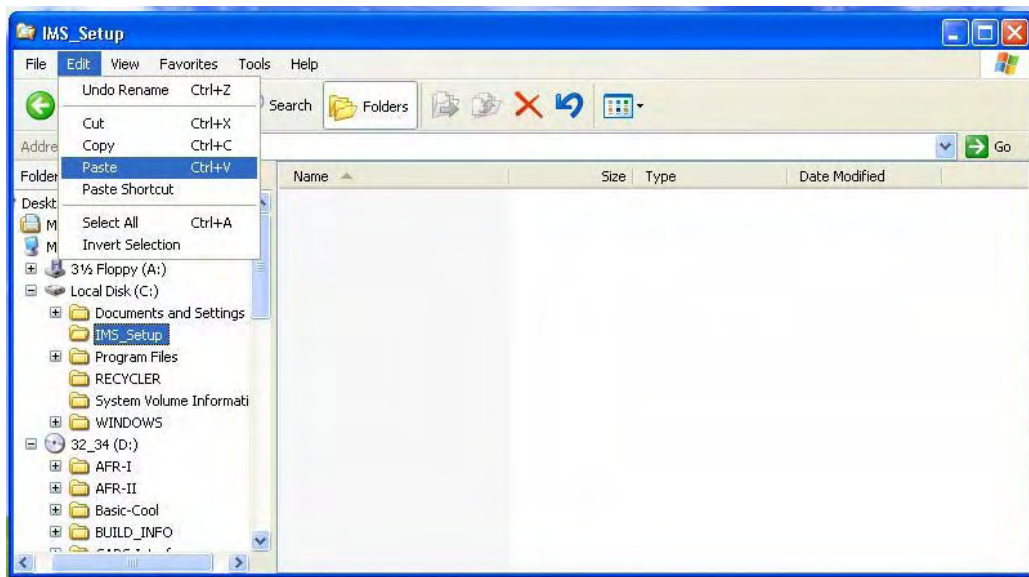


Figure 1-76. Explorer Window – Paste All Folders

10. A window used for copying is displayed and the content of the CD is copied to the chosen folder. The copy process will finish in approximately 5 minutes.
11. If copy fails, repeat steps 5 to 10. If it fails a second time, ask the MTSC for a new media and repeat steps 5 to 10.
12. If not selected, select the folder **IMS_Setup** in the left part of the explorer (Figure 1-77).

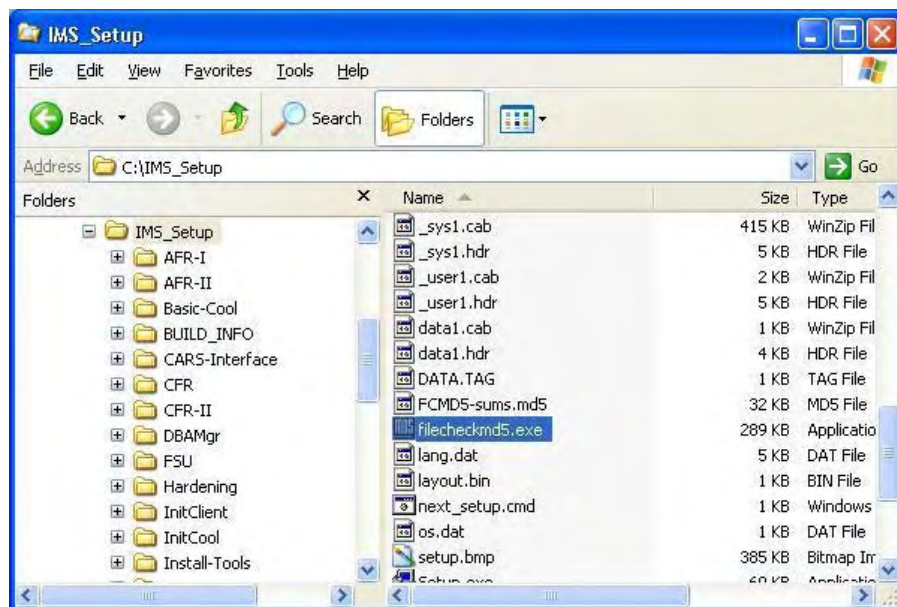


Figure 1-77. Select md5 Filecheck

13. Locate the file, **filecheckmd5.exe** in the right part of the Explorer and double click it. A "FileCheckMD5" window is displayed (Figure 1-78).

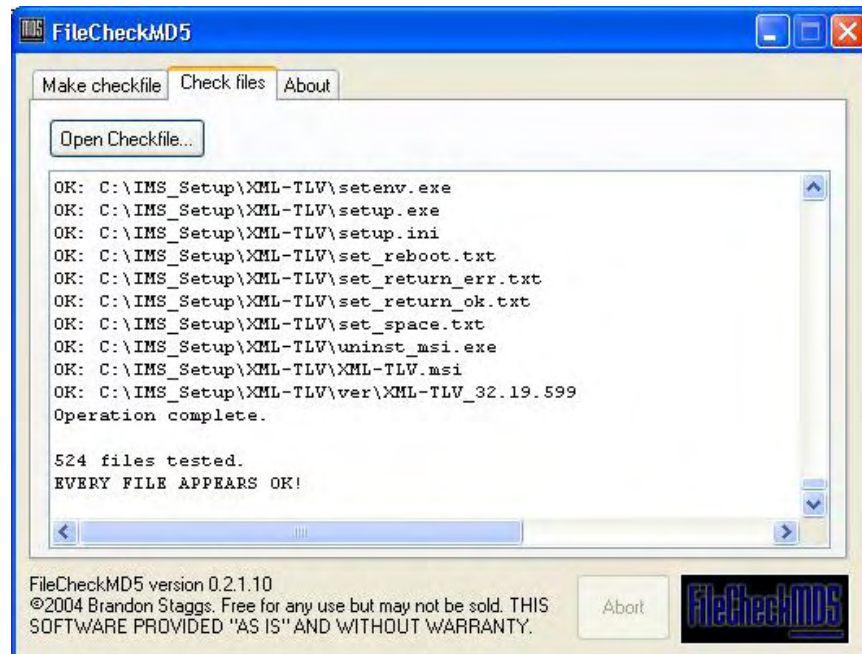


Figure 1-78. md5 Filecheck Executed

14. If file check fails, repeat steps 5 to 13. If it fails again, ask the MTSC for a new media and repeat steps 3 to 13.
15. If file check is successful, the message, "EVERY FILE APPEARS OK!" is displayed (number of tested files may change). Click **X** to close window.
- 10.2.5.2 Create a folder for the IMS dictionaries and copy the dictionaries from DVD to Drive Duplicator drive C:
1. Select **Local Disk (C:)**.
 2. Select **File, New, and Folder** from the menu bar (Figure 1-79).



Figure 1-79. Explorer Window – New Folder

In the right part of the Explorer window, a “New Folder” will be created (Figure 1-80).

3. Enter **IMS_Dict** and press **Enter**.

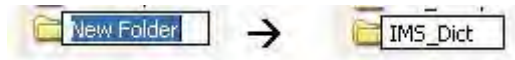


Figure 1-80. New Folder IMS_Dict

4. Open CD drive, remove IMS Setup CD and insert PARS IMS 4.0.1 P&DC, PARS IMS P&DC Dictionaries (DVD): Version 4.0.1 (Build: N/A), P/N 600-2670-000ODT, Volume 1 of 1 **Error! Reference source not found.**
5. Close the CD drive.

NOTE

If an additional explorer window pops up, click on **X** to close this window.

6. In the left pane of the Explorer window, locate the CD drive. Click on it and select the folder **cfg_srv** in the right pane of explorer (Figure 1-81).



Figure 1-81. Select Folder cfg_srv

7. Select **Edit** and **Copy** on the menu bar (Figure 1-82).



Figure 1-82. Copy Folder cfg_srv

8. Locate the **C:\IMS_Dict** folder and click on it. If the folder is not visible, click on the + sign at left hand of 'Local Disk (C:):'.
9. Select **Edit** and **Paste** on the menu bar (Figure 1-83).



Figure 1-83. Paste Folder cfg_srv

A window used for copying is displayed and the content of the DVD is copied to folder. This may take up to 15 minutes.

10. If copy fails, repeat steps 6 to 9. If it fails a second time, ask the MTSC for a new media and repeat steps 4 to 9.
11. Remove dictionary DVD from USB CD/DVD drive.

10.2.5.3 Create IMS Backup folder

1. In the left pane of the Windows Explorer, select **Local Disk(C:)**.
2. Select **File, New, and Folder** on the Windows Explorer menu bar (Figure 1-84).

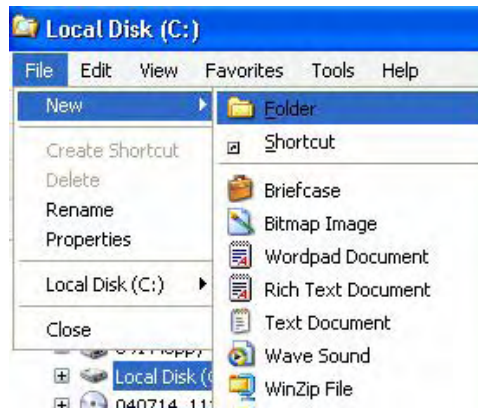


Figure 1-84. New Folder

A New Folder is displayed in the right part of the explorer window (Figure 1-85).



Figure 1-85. New Folder IMS3_Backup

3. Enter **IMS3_Backup** and press the **Enter** key.

10.2.5.4 Install the Scripts for Automatic Network Configuration

1. Select the folder **C:\IMS_Setup** in left Explorer pane.
2. Locate the file **Setup_AutoIP.cmd** in the right pane (Figure 1-86).

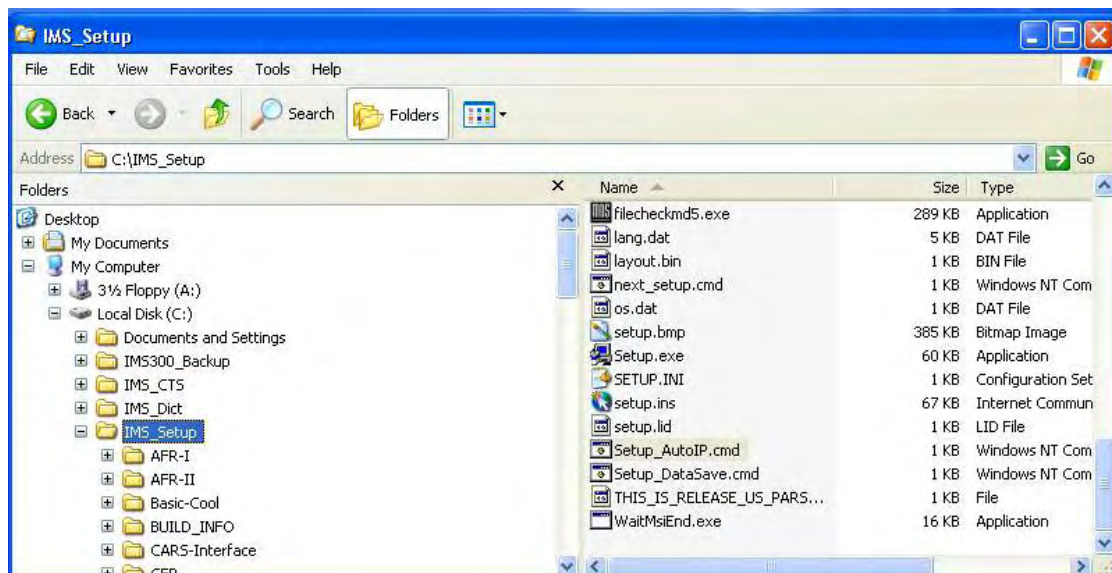
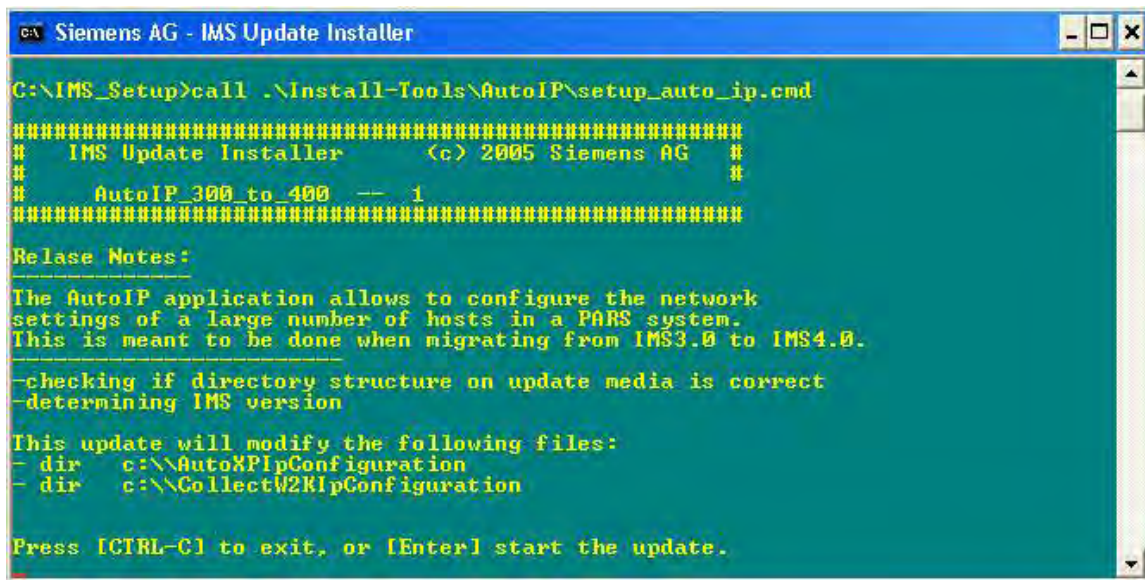


Figure 1-86. Setup_AutoIP.cmd Selected

- Double click on the file to start the installation of the AutoIPConfiguration scripts. A "Siemens AG – IMS Update Installer" DOS window is displayed (Figure 1-87).



```

C:\IMS_Setup>call .\Install-Tools\AutoIP\setup_auto_ip.cmd

#####
#   IMS Update Installer       (c) 2005 Siemens AG   #
#   AutoIP_300_to_400  --  1   #
#####

Release Notes:

The AutoIP application allows to configure the network
settings of a large number of hosts in a PARS system.
This is meant to be done when migrating from IMS3.0 to IMS4.0.

- checking if directory structure on update media is correct
- determining IMS version

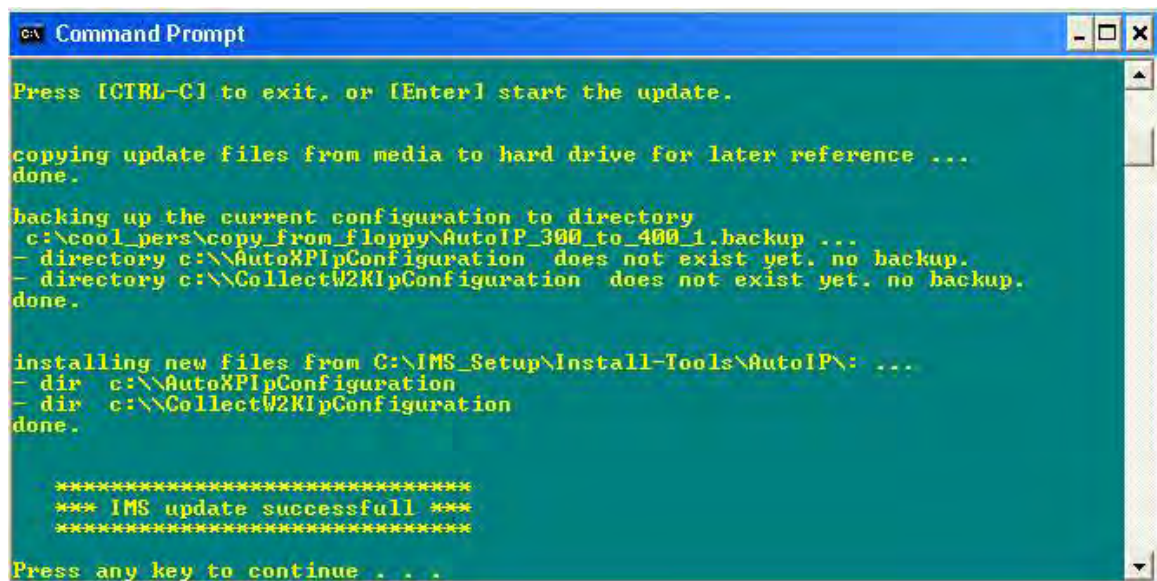
This update will modify the following files:
- dir  c:\AutoXPIpConfiguration
- dir  c:\CollectW2KIpConfiguration

Press [CTRL-C] to exit, or [Enter] start the update.
  
```

Figure 1-87. Start Screen Setup AutoIP

- Press the **Enter** key.

The installation starts. When finished, the DOS window will state "IMS update Successfull" (Figure 1-88).



```

C:\> Command Prompt

Press [CTRL-C] to exit, or [Enter] start the update.

copying update files from media to hard drive for later reference ...
done.

backing up the current configuration to directory
c:\cool_pers\copy_from_floppy\AutoIP_300_to_400_1.backup ...
- directory c:\AutoXPIpConfiguration does not exist yet. no backup.
- directory c:\CollectW2KIpConfiguration does not exist yet. no backup.
done.

installing new files from C:\IMS_Setup\Install-Tools\AutoIP\ : ...
- dir  c:\AutoXPIpConfiguration
- dir  c:\CollectW2KIpConfiguration
done.

*****
*** IMS update successfull ***
*****

Press any key to continue . . .
  
```

Figure 1-88. End Screen Setup AutoIP

- Press the **Enter** key to close the DOS window.

The setup of the AutoIPConfiguration scripts is finished.

10.2.5.5 Collect the IMS Network Configuration

1. Proceed to an IMS RIC or Supervisor's UI. Select **UI System** and **Start/Stop** and verify all IMS systems are up and ready. If not, turn power on and start the IMS application from the Supervisor UI. Check both IMS RICs and Supervisor UIs.
2. Return to the drive duplicator.
3. To start the AutoIPCollect script on the Drive Duplicator, navigate to the folder **C:\CollectW2KIpConfiguration**.
4. Locate the file and double click **GetIMS300IP_PDC.bat** to start the script.

A Command window opens and shows the progress of the IMS network configuration collection.

NOTE

The script auto-collects network and system related data of all computers at the site:

- host name (computer name)
- network adapter 1 configuration (MAC address, IP configuration)
- network adapter 2 configuration (MAC address, IP configuration)
- size of page file

The collected data will be stored to the text file "IPConfiguration.txt" on the Drive Duplicator.

5. Wait until the auto-collection script is finished. Continue by pressing any key to close the progress window.
6. Verify the collected IMS 3 IP configuration:
 - a. In the left pane of the active Windows Explorer, click on the folder **C:\CollectW2KIpConfiguration**.
 - b. If there is a file wrong_network_adapter.txt, the network adapter has a wrong name.
 - c. In the Explorer right pane, double-click on the file **IpConfiguration.txt**. The file will be displayed in an editor.
 - d. Verify that all hostnames according to siteconfig.ini are listed.
Since every box has two network adapters, each hostname must show up twice (not necessary for a SuperVisor UI computer).
If there are systems in siteconfig.ini that can not be accessed over the network, these systems are listed in the file Ipconfiguration_failed.txt.
 - e. Verify the computers listed in Ipconfiguration_failed.txt are powered off on purpose or incorrectly attached to the network.
 - f. Review the files wrong_network_adapter.txt and Ipconfiguration_failed.txt carefully and change wrong configurations manually on all relevant systems.
 - g. Verify the adapter names are **PARS_MNS Net** and/or **CARS Net**. If not, proceed to the corresponding computer, rename the network adapter appropriately, and start the collection again at step 4 above.
 - h. Remove CD #2 with Drive Duplicator ghost image from CD drive.

The setup of the drive duplicator is complete.

10.3. AFR-I-01 PREPARATION FOR CLONING

10.3.1. Install Operating System on AFR-I 01 from USB

The following is an overview of AFR-I cloning:

1. Install operating system on AFR-I 01 from USB (section 10.3.1.4, OS Installation.)
2. Basic configuration (section 10.3.2) of:
 - network connections (names + ip-addresses)
 - hostname
 - workgroup
 - date / time zone
3. Re-boot computer if necessary (section 10.3.2.4).
4. Installation of AutoIP scripts to AFR-I 01 (section 10.3.2.5)
5. Remove disc for cloning.

10.3.1.1 Stop IMS Application on AFR-I 01

1. Go to IMS UI RIC or Supervisor's UI.
2. If not already logged on, log on to the IMS application as **SEC Technician** (Figure 1-89).
 - a. Mark the **I agree** checkbox by clicking on it.
 - b. In the 'Enter Logon ID' field, type **SEC Technician**.
 - c. In the 'Enter your Password' field, type the appropriate password.
 - d. Click on **Logon**. The 'Site Overview' window is displayed.

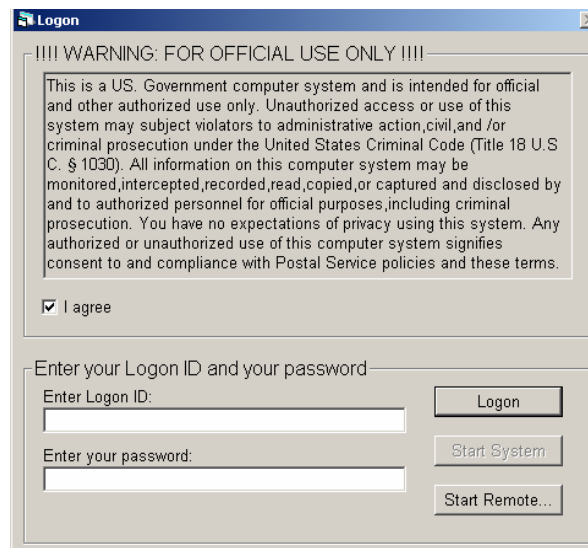


Figure 1-89. Logon Window

- If not already opened, open the Start/Stop frame by selecting **System** and **Start/Stop** on the "PARS Supervisor User Interface" menu bar (Figure 1-90).



Figure 1-90. Open Start / Stop Frame

The "Coding System" window is displayed (Figure 1-91).

- In the "Subsystems" field, choose an **AFR I** (Figure 1-91).

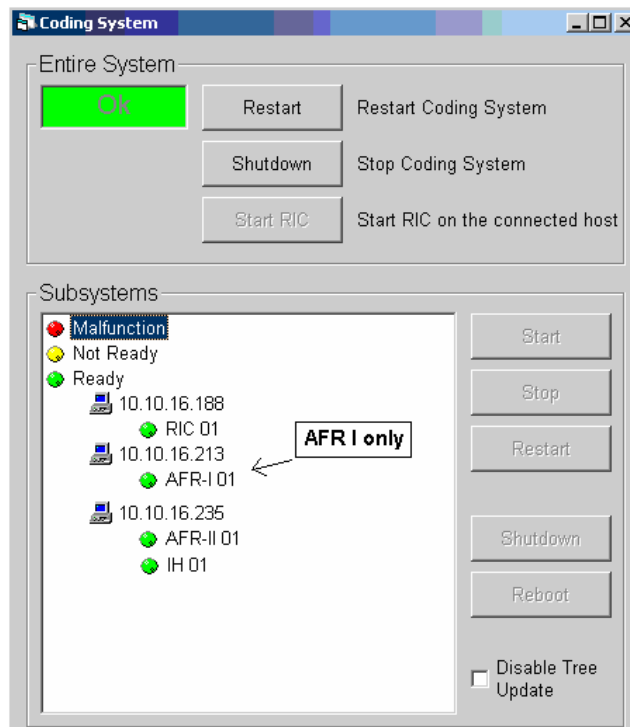


Figure 1-91. Start/Stop Window with AFR Selected

5. Highlight the IP address (Example: 10.10.16.213) (Figure 1-92). This will enable the corresponding action buttons on the right side of the window.
6. Click **Shutdown**.

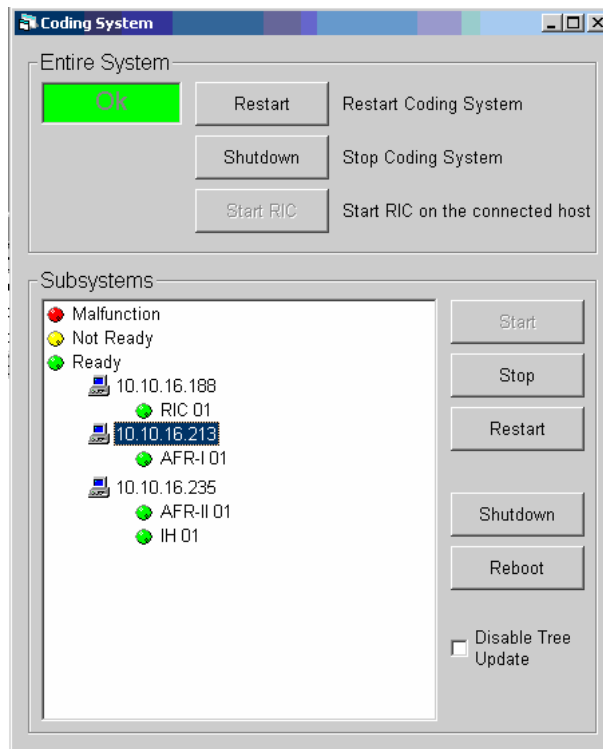


Figure 1-92. Selected AFR

The "uicool" popup window is displayed with the message "Do you really want to execute 'Stop' on host 10.10.16.213'." (Figure 1-93).

7. Click on **Yes**. This will stop the IMS application on this computer upon confirmation.

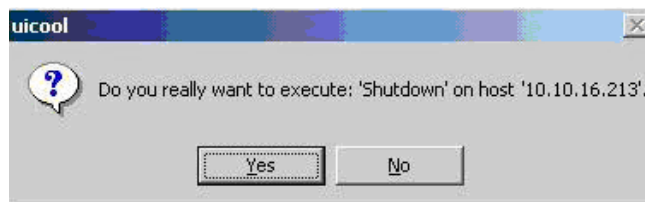


Figure 1-93. Really Shutdown Selected System

The AFR is displayed in status Not Ready (Figure 1-94).

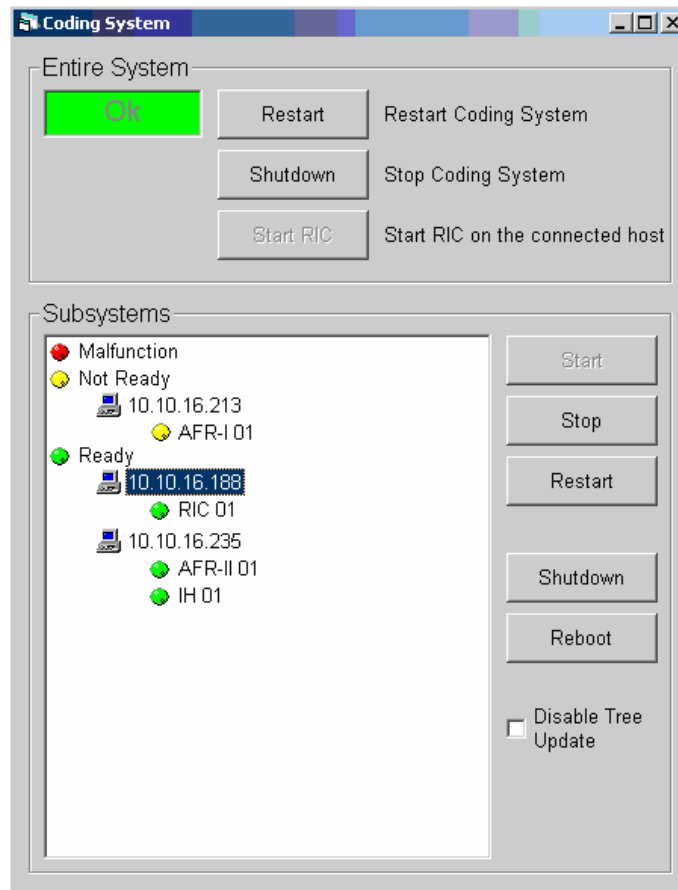


Figure 1-94. Stopped AFR I

8. Go to the rack where the AFR-I 01 computer is mounted and switch keyboard and monitor to AFR-I 01.
9. Connect the external USB CD/DVD drive to the computer by plugging its USB cable into the USB port, located behind the fold down door, on the front of the computer. Also connect its power cable to the AC outlet on the lower right side of the cabinet.
10. Power up the USB CD/DVD drive.

11. Get the appropriate ghost CDs, either for Phase I or Phase II, according to the IMS hardware at the P&DC site (Table 1-3):

Table 1-3. PARS Ghost CD Listing for PARS Phase 1 and PARS Phase 2

PARS PHASE I	PARS PHASE II
PARS IMS 4.0.1 P&DC, PARS Phase I RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.103-01.ODT, Volume 1 of 2	PARS IMS 4.0.1 P&DC, PARS Phase II RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.102-01.ODT, Volume 1 of 2
PARS IMS 4.0.1 P&DC, PARS Phase I RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.103-02.ODT, Volume 2 of 2	PARS IMS 4.0.1 P&DC, PARS Phase II RIC/AFR OS Installation Kit (Windows XP) (CD): Version XP, (Build: 4.0.1), P/N 66.6015.102-02.ODT, Volume 2 of 2

12. Press the button on the CD drive to open its drawer, insert the appropriate PARS Phase ghost CD #1 into the drive and close the drawer.
13. If you have Phase I Hardware, go to section 10.3.1.2. If you have Phase II Hardware, go to section 10.3.1.3.

10.3.1.2 Preparing the BIOS configuration for booting from CD for Phase I Hardware

The computer (AFR-I 01) must be configured to boot from the CD drive (BIOS setup).

The configuration can be adapted by completing the following steps:

1. Turn computer on.
2. When the computer starts, press the **F2** key as directed by the boot-up sequence (Figure 1-95).

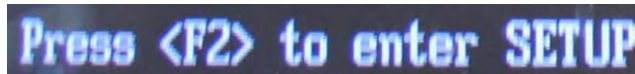


Figure 1-95. F2 to Enter Setup

3. The main "PhoenixBIOS Setup Utility" screen is displayed (Figure 1-96).
4. Use the arrow keys to highlight the **Advanced** menu option.

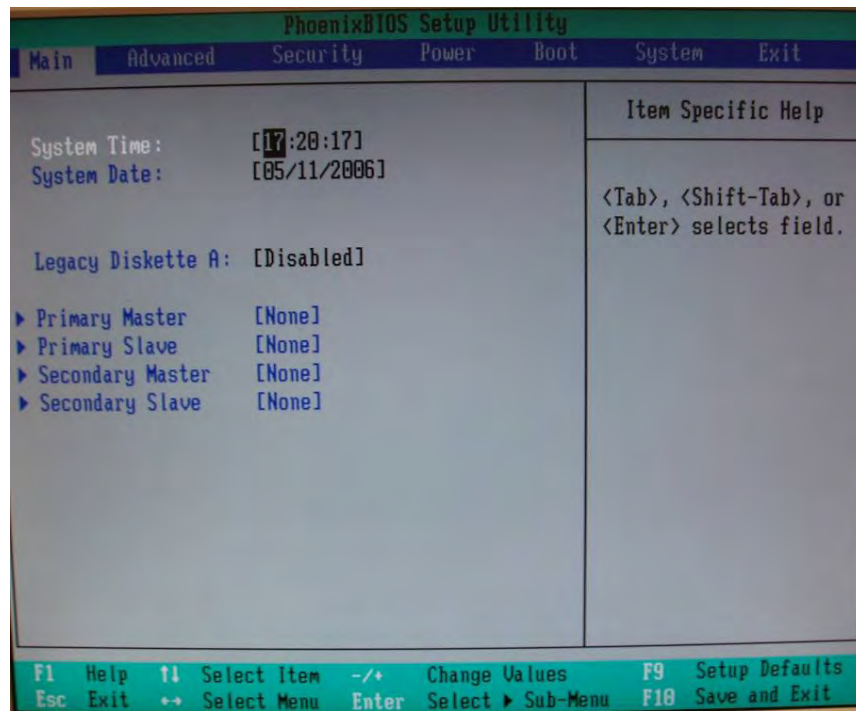


Figure 1-96. BIOS Start Screen

5. Verify that 'Legacy USB Support' is enabled. If necessary, select the entry, using the arrow down key and change from Disabled to **Enabled** pressing + (Figure 1-97).

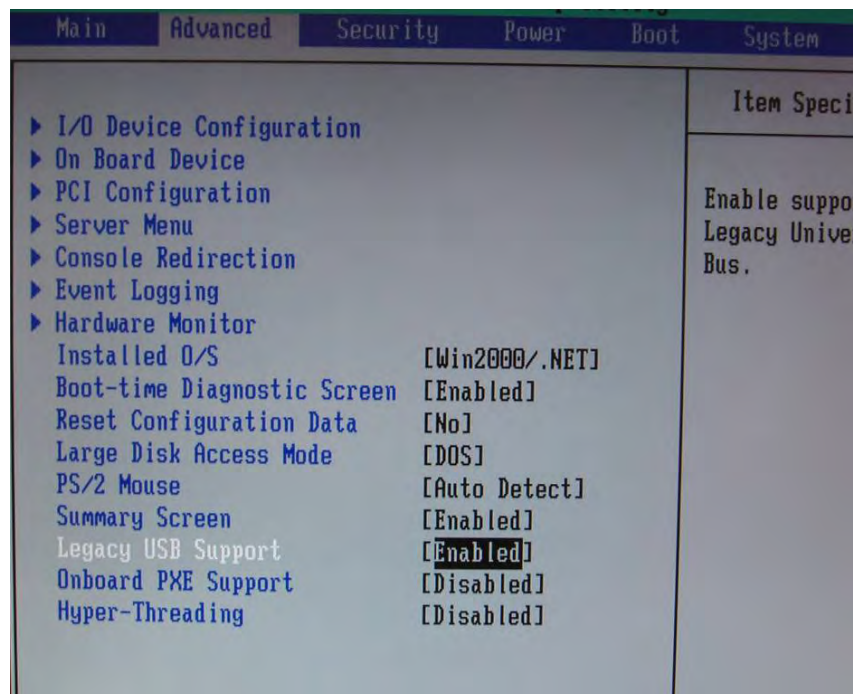


Figure 1-97. BIOS Advanced Screen

6. Use the arrow keys to highlight the **Boot** menu option. The "Boot" screen displays "Removable Devices", "CD-ROM Drive", "+Hard Drive", and "Network Boot" in some order (Figure 1-98).
7. If not already at the top of the list, use the arrow keys to highlight the **Removable Devices** and use the + key to move it to the top of the list.

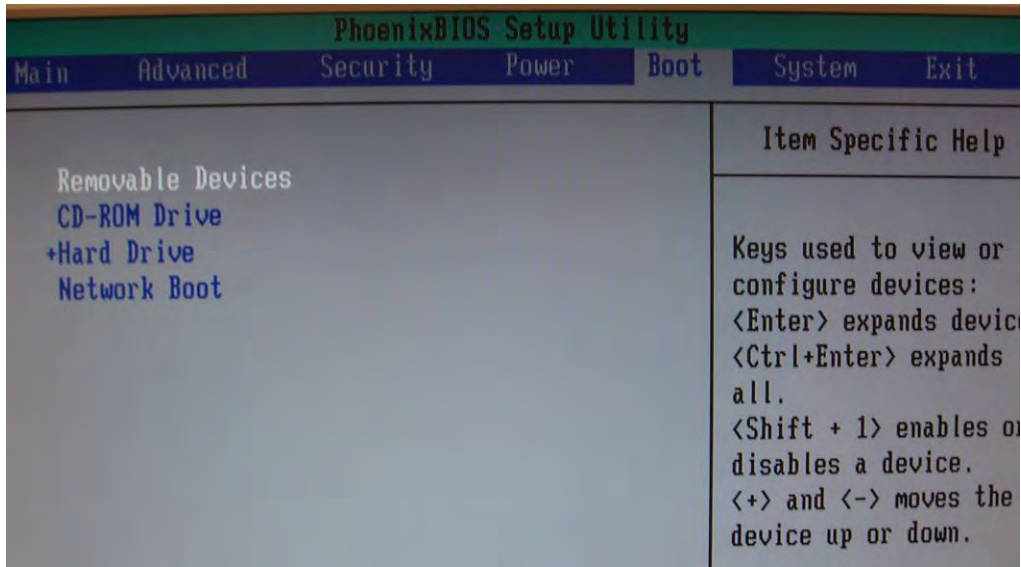


Figure 1-98. BIOS Boot Menu

8. Press **F10** to save and exit the BIOS. The "Setup Confirmation" popup window displays the wording, "Save configuration changes and exit now?" (Figure 1-99). The "[Yes]" option should be highlighted.
9. Press **Enter** to save the BIOS configuration and computer will reboot.

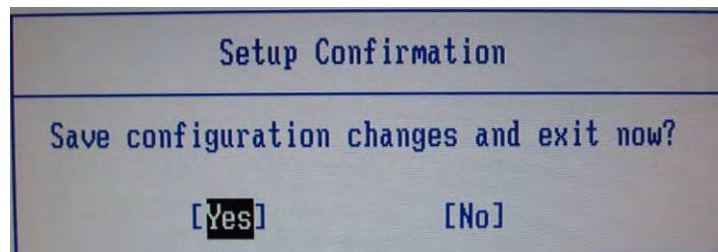


Figure 1-99. BIOS Save Setup

10. Proceed with section 10.3.1.4, OS Installation.

10.3.1.3 Preparing the BIOS configuration for booting from CD for Phase II Hardware

The computer must be configured to boot from the CD drive (BIOS setup).

The configuration can be adapted by completing the following steps:

1. Turn computer on.
2. When the computer restarts, press the **F2** key as directed by the boot-up sequence (Figure 1-100).

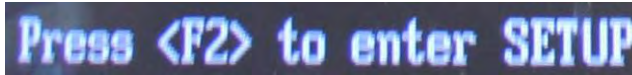


Figure 1-100. F2 to Enter Setup

The main "PhoenixBIOS Setup Utility" screen is displayed (Figure 1-101).

3. Press the **F2** key.

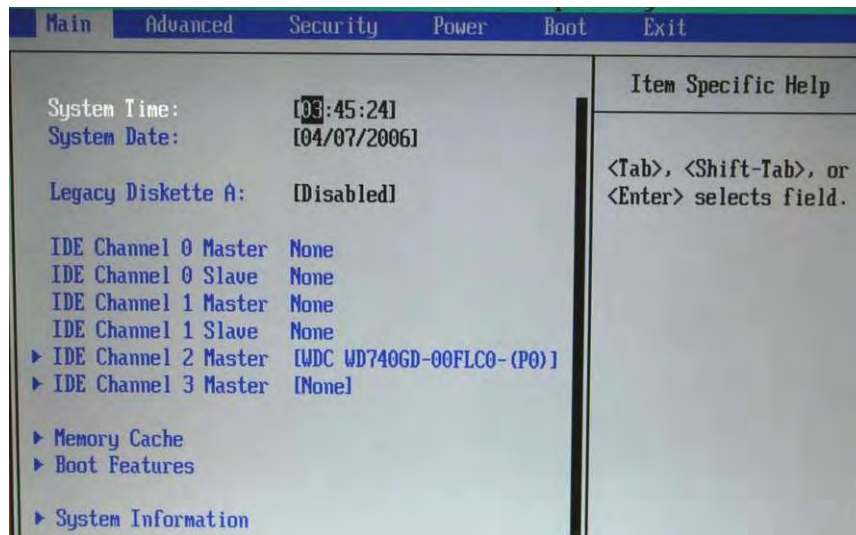


Figure 1-101. Setup

4. Select **Advanced** on the menu bar (Figure 1-102).
5. Verify that "Legacy USB" Support is Enabled. If it is disabled, highlight the entry and press **+** to **Enable**.

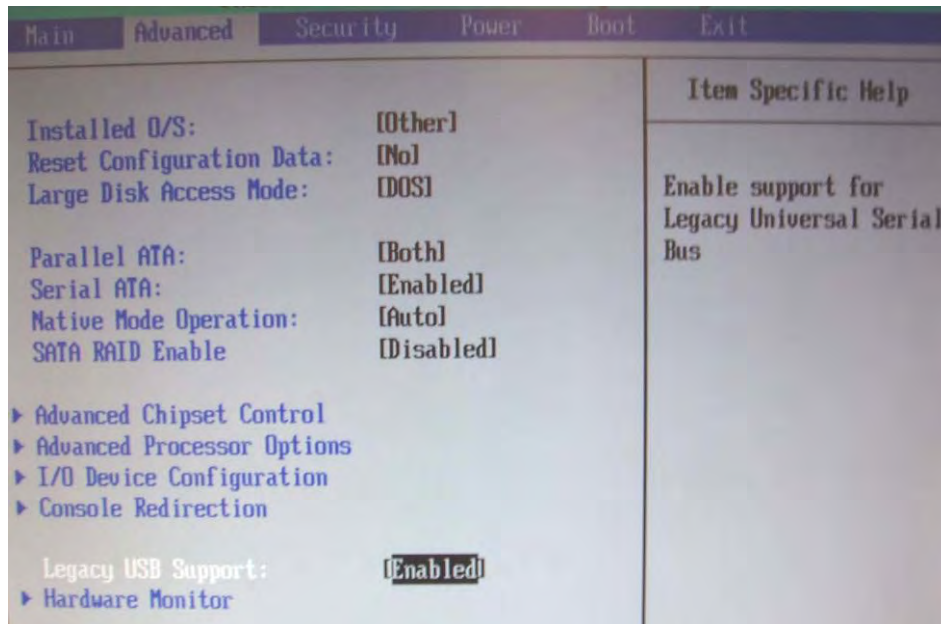


Figure 1-102. Select Legacy USB Support

6. Highlight **Advanced Chipset Control** and press **Enter** (Figure 1-103).

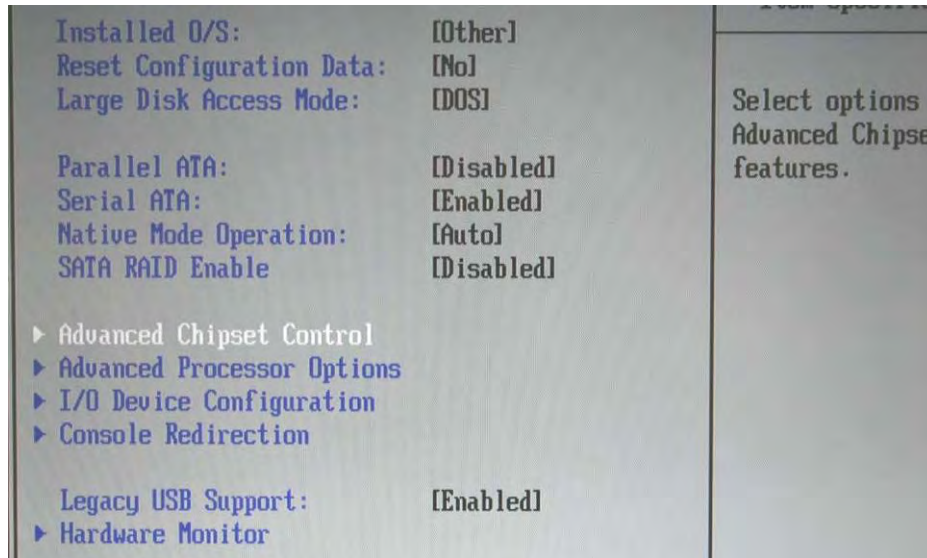


Figure 1-103. Advanced Options

7. Highlight **Integrated USB** and press the **Enter** key (Figure 1-104).

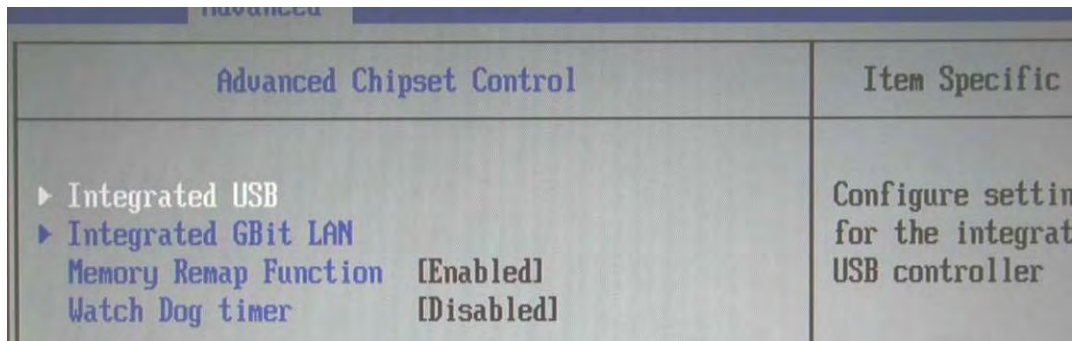


Figure 1-104. Integrated USB

8. Verify the integrated USB 2.0 is Disabled. If required, change it to **Disabled**, using the **Shift** and **+** key (Figure 1-105).

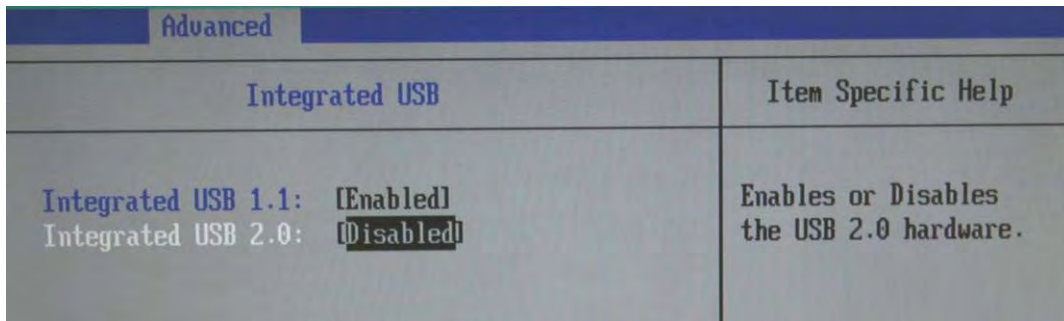


Figure 1-105. USB Settings

9. Press **ESC** and **ESC** to enter main screen.
 10. Select **Boot** (Figure 1-106).
 11. If not already at the top of the list, use the arrow keys to highlight **Removable Devices** and use the **+** key to move it to the top of the list.

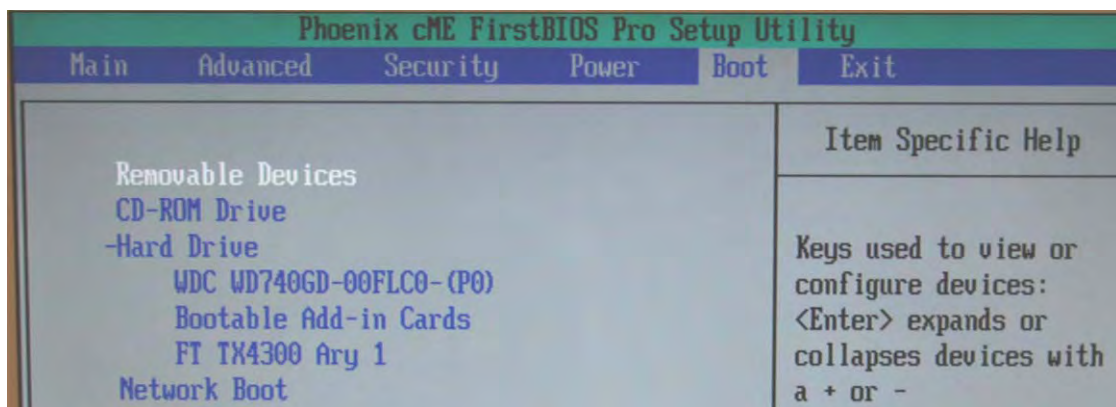


Figure 1-106. Boot Configuration Phase II Hardware

12. Press **F10** to save and exit the BIOS. The "Setup Confirmation" popup window displays the wording "Save configuration changes and exit now?". The **Yes** option should be highlighted (Figure 1-107).
13. Press **Enter** to save the BIOS configuration and the computer will reboot.

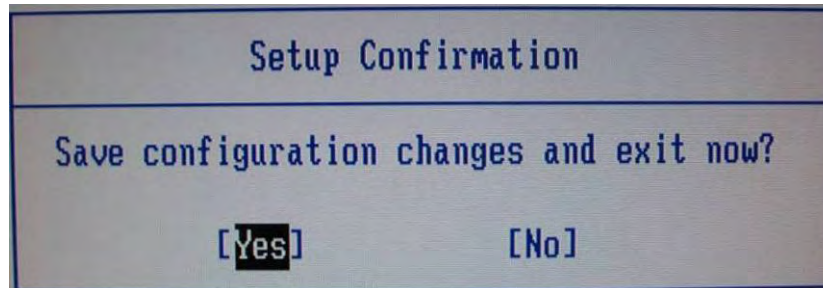


Figure 1-107. BIOS Save Setup

10.3.1.4 OS Installation

If the destination hard drive is not already marked by the Ghost program, a "License agreement warning" dialog is displayed (Figure 1-108).

1. Click on **Continue without marking drives**.

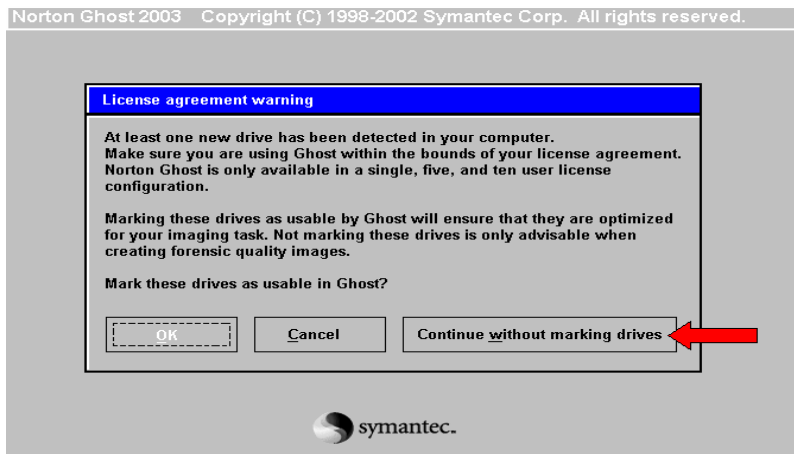


Figure 1-108. License Agreement

- After a couple of a seconds, a ghost start dialog is displayed (Figure 1-109). Click **Yes** to confirm correct partition size.

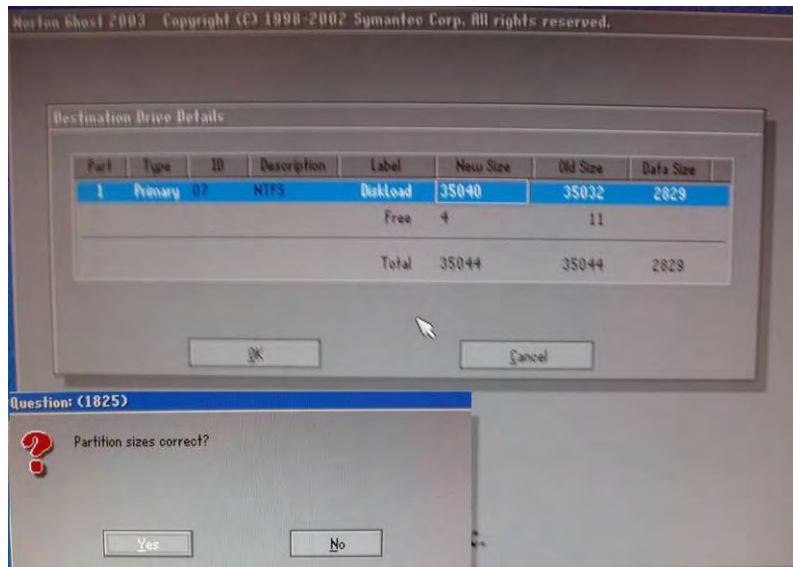


Figure 1-109. Ghost Start dialog

A confirmation window is displayed with wording such as, "Proceed with disk restore? Destination drive will be permanently overwritten" (Figure 1-110).

- Click **Yes** to start the copy process. The disk activity light will flash on the CD/DVD drive and the "Progress Indicator" on the "Norton Ghost" screen will begin to climb.

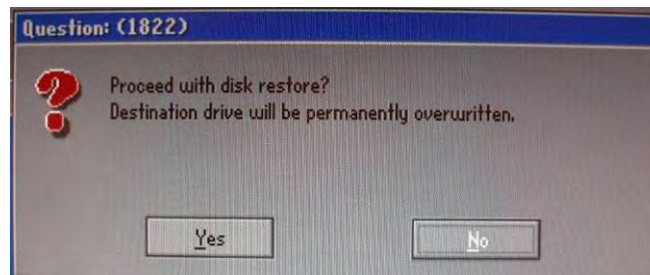


Figure 1-110. Proceed with Restore

4. When a "Span Volume" popup window is displayed (Figure 1-111), remove CD #1 from the CD/DVD drive, and replace it with CD #2 for the appropriate PARS Phase media (Refer to Table 1-3, on page 65).
5. Click on **OK**.

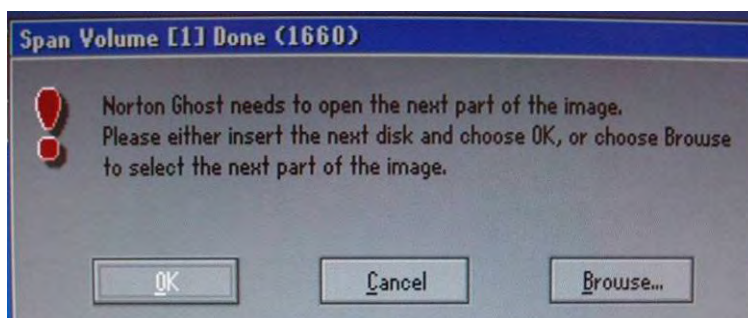


Figure 1-111. Span Volume

A "Clone Complete" popup window is displayed when the restore is finished (Figure 1-112).

6. Select **Continue**. The computer will display the prompt "A:\>".

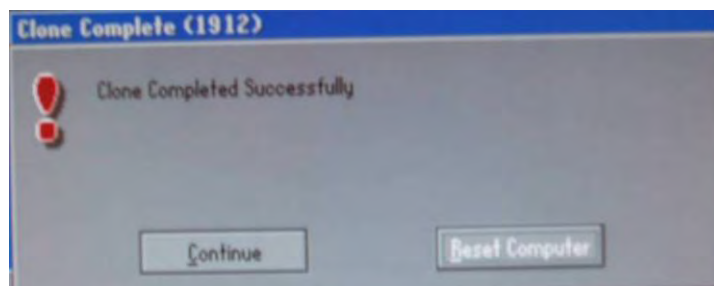


Figure 1-112. Ghost Clone Complete Dialog

7. Remove the CD.
8. Turn off the USB CD/DVD drive. Disconnect it from the computer and the power source.
9. Reboot the computer by pressing the **Ctrl-Alt-Del** keys simultaneously.
10. The computer will reboot and display the "Welcome to Windows" popup. Simultaneously press **CTRL-ALT-DEL**.

11. The computer displays the "Log On to Windows" popup (Figure 1-113).
12. Log on as "usps admin" by entering the username **usps admin** and enter the appropriate password. Click **OK**.

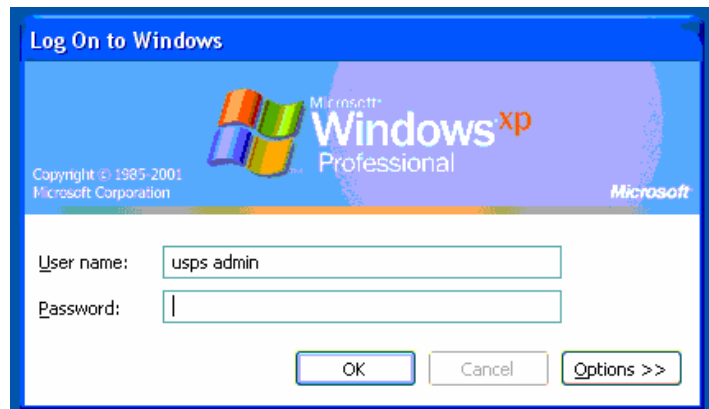


Figure 1-113. Log on to Windows

13. After a couple of seconds, the "System Settings Change" popup window displays the message, "Do you want to restart your computer now?" (Figure 1-114).
14. Click on **No** to continue.

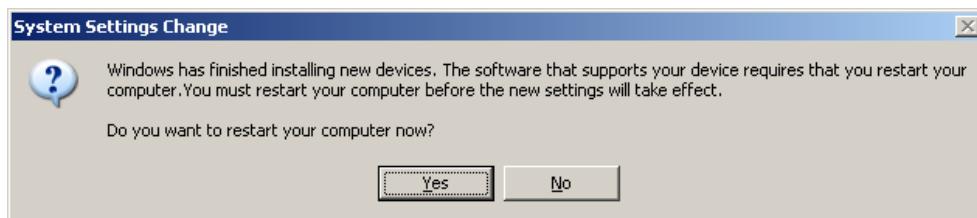


Figure 1-114. Restart After Installing New Devices

The computer is now ready for its Basic Configuration.

10.3.2. Basic Configuration of AFR-I 01

10.3.2.1 Date / Time zone Configuration

1. On the Windows taskbar, select **Start**, **Settings**, and **Control Panel** to open the Control Panel (Figure 1-115).

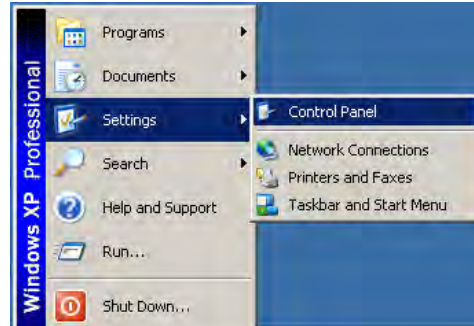


Figure 1-115. Select Control Panel

2. In the "Control Panel" window (Figure 1-116), double click on **Date and Time** icon.

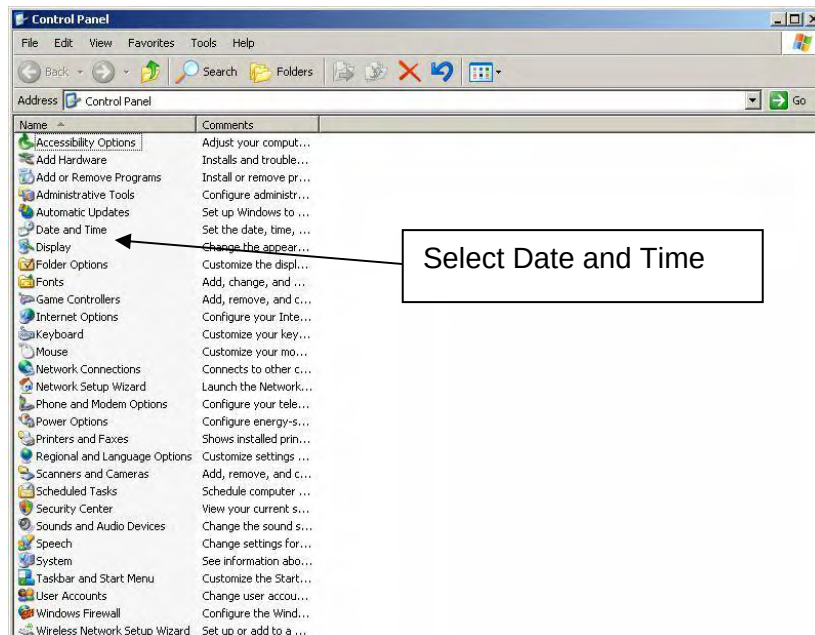


Figure 1-116. Control Panel Window

The "Date and Time Properties" popup is displayed (Figure 1-117).

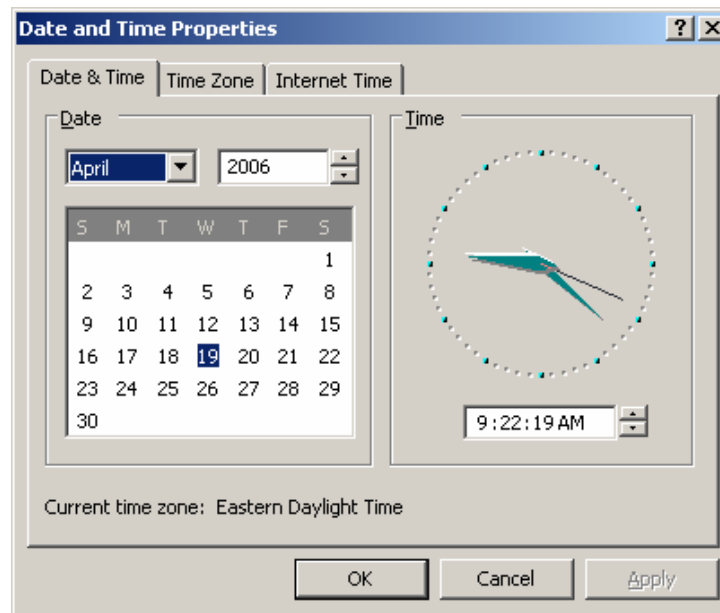


Figure 1-117. Date and Time Properties

3. Click on the **Time Zone** tab (Figure 1-118).
4. Click on down arrow (▼) to display the time zone list.
5. Select the time zone for the area where the computer is located.
6. Click on **Apply**.

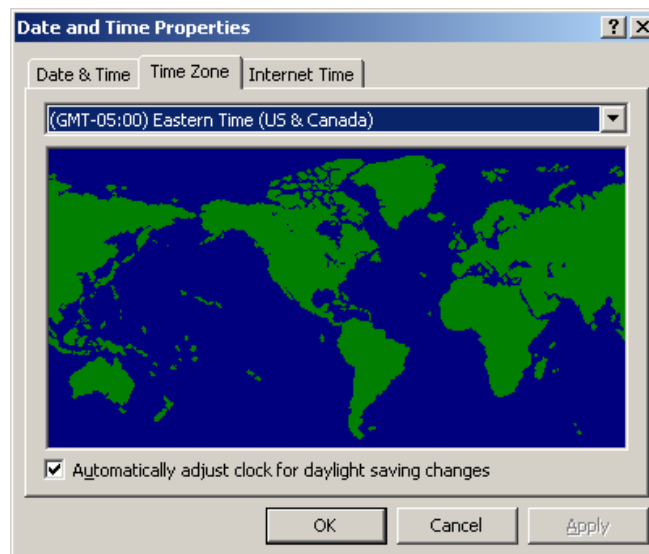


Figure 1-118. Date and Time Setting Dialog

7. Click on **Date & Time** tab.
8. Verify current time and date. If necessary, adapt them by highlighting each field within the time field (i.e. hours, minutes, and seconds). Use the arrow keys to move it forward or backwards.

9. Click on **OK**.
10. Close the "Control Panel" window by clicking on **X** in upper right corner of window.
- 10.3.2.2 Set-up the Network Configuration on AFR-I 01

NOTE

For information on configuration, using DNS or ALIAS NAMES, contact The Maintenance Technical Support Center (MTSC) at 1-800-366-4123

1. Right click on **My Network Places** on the desktop and select **Properties**.
The "Network Connections" window is displayed, similar to the one in Figure 1-119.

NOTE

As different mainboards are used, the numeration of the 'Local Area Connection' may vary.

2. Right-click on the name **Local Area Connection** to open the context menu.
3. Select **Rename**. The cursor flashes at the right end of the "Local Area Connection" name field.
4. Type in the new name **CARS_(space)Net** and press the **Enter** key.
5. Right-click on the name **Local Area Connection 2** to open the context menu.
6. Click on **Rename**. The cursor flashes at the right end of the "Local Area Network Connection" name field.
7. Type in the new name **PARS_MNS_(space)Net** and press the **Enter** key.

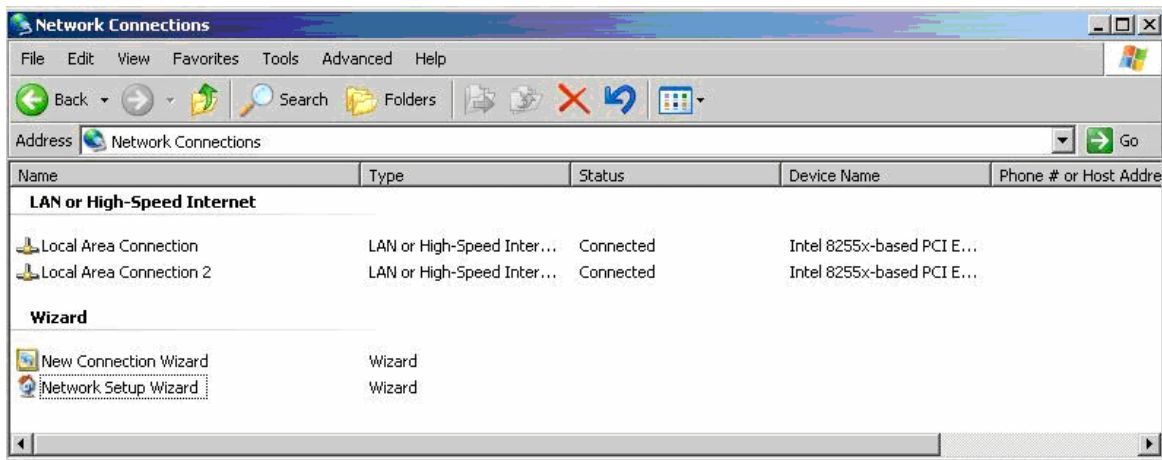


Figure 1-119. Network Connections Window

10.3.2.3 Configuring PARS and MNS NET

1. Right click on the **PARS_MNS Net** name to open the context menu and select **Properties**. The "PARS_MNS NET Properties" popup is displayed (Figure 1-120).
2. Click on **Internet Protocol (TCP/IP)** to highlight it and click on **Properties**.

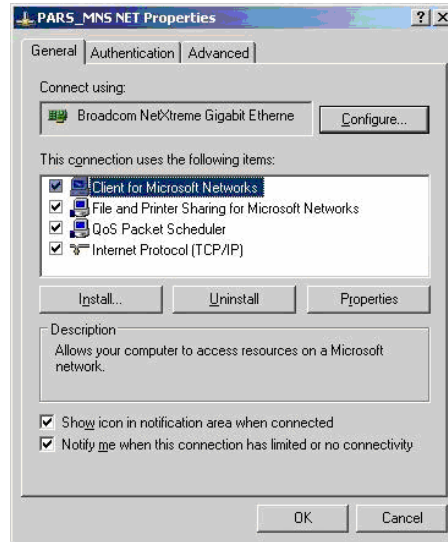


Figure 1-120. PARS_MNS NET Properties Dialog

The "Internet Protocol (TCP/IP) Properties" popup is displayed (Figure 1-121).

3. Select radio button **Use the following IP address:**.
4. Type in the AFR-I 01 IP address **10.10.16.211** in the IP address field.
5. Press the **Tab** key. The cursor will move to the left end of the "Subnet mask:" field and 255 will be displayed as the first octet.
6. Type in the subnet mask **255.255.255.0**.
7. Close the "Internet Protocol (TCP/IP) Properties" dialog by clicking on **OK**.

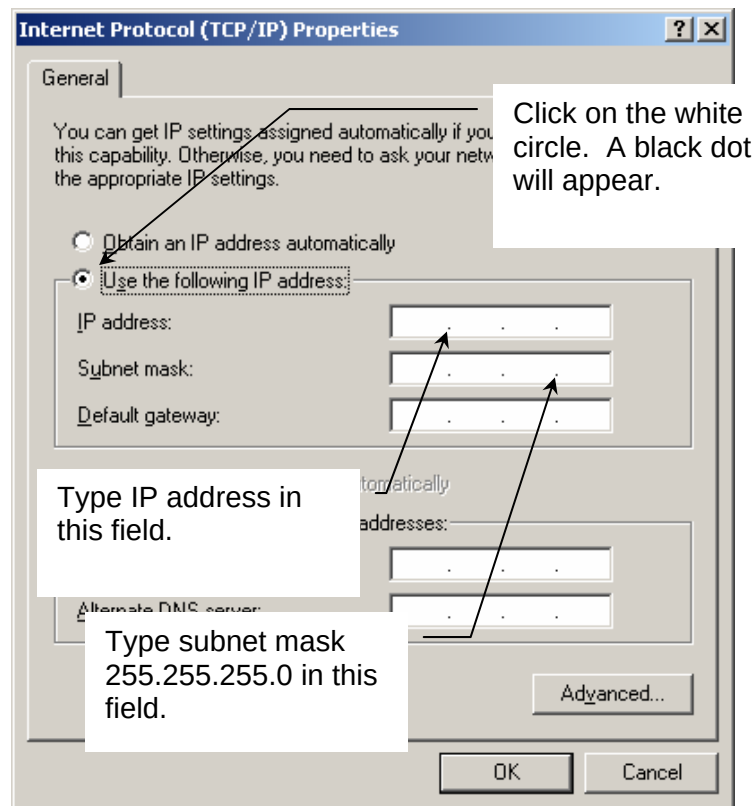


Figure 1-121. PARS_MNS NET Internet Protocol Properties Window

8. Close the "PARS_MNS NET Properties" dialog by clicking on **Close**.
9. Close the "Network Connections" dialog by clicking on its **X** button.

10.3.2.4 Configuration of the Computer Name for AFR-I 01

NOTE

Do not to use duplicate computer names.

1. Right click on the **My Computer** icon on the desktop. A context menu is displayed.
2. Click on **Properties**. The "System Properties" popup is displayed. Click on the **Computer Name** tab (Figure 1-122).
3. Click on the **Change** button.

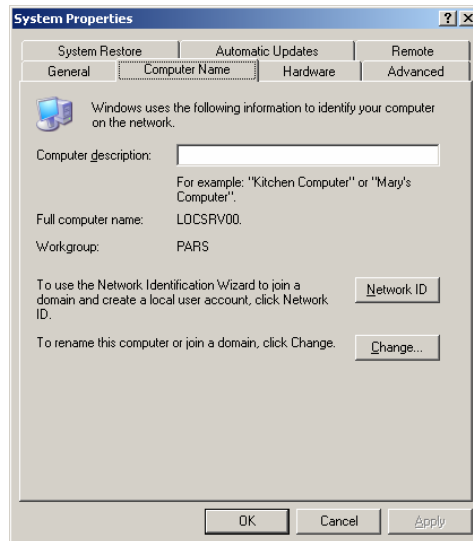


Figure 1-122. Properties, Computer Name tab

The "Computer Name Changes" dialog is displayed (Figure 1-123).

4. In the "Computer name:" field, type in the computer name for AFR-I 01, following your site specific naming conventions. Refer to the label applied to the AFR-I 01 box in the PARS rack or to the printout of the file 'siteconfig.ini'.
(example: hostname for P&DC Lake Mary AFR-I 01: LKMRFLMAF00).
5. In the "Workgroup" field type in **PARS**.
6. Click on **OK**.



Figure 1-123. Computer Name and Workgroup Setting Dialog

7. The "Computer Name Changes" window pops up (Figure 1-124). Click **OK**.



Figure 1-124. Welcome to the PARS Workgroup

8. Another "Computer Name Changes" popup is displayed (Figure 1-125). Click **OK**.



Figure 1-125. Restart After Changes

The "System Properties" window displays the computer name and workgroup just entered (Figure 1-126).

9. Verify full computer name and workgroup, adapt them if necessary, using the Change button again, then continue with **OK**.

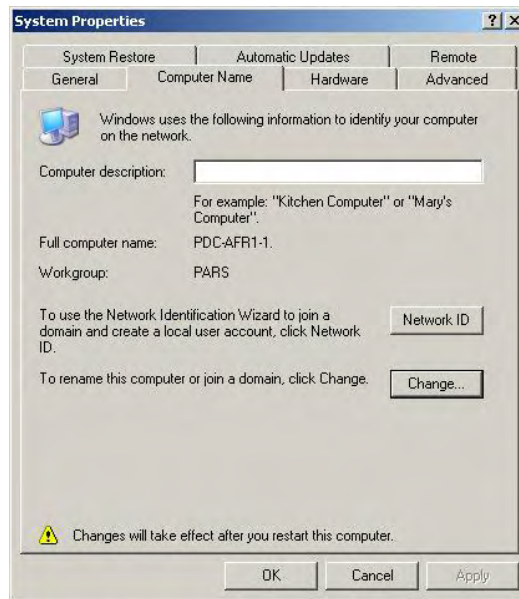


Figure 1-126. System Properties Tab

10. The "System Settings Change" popup is displayed (Figure 1-127). Click **Yes**. The AFR-I 01 will reboot.

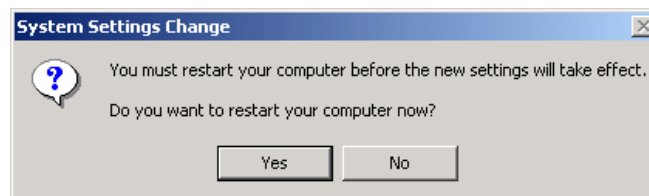


Figure 1-127. Reboot Computer Dialog

11. Login as **usps admin**.

12. Verify that AFR-I 01 has connection to the Drive Duplicator. Open a "cmd.exe" Command window:

- a. On the Windows taskbar, select **Start** and **Run** (Figure 1-128).

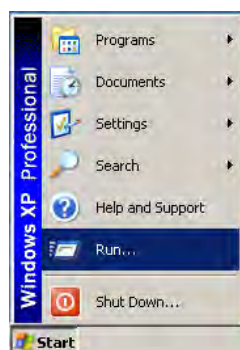


Figure 1-128. Run...

- b. The "Run" popup is displayed (Figure 1-129). Type in **cmd** and click on **OK**.

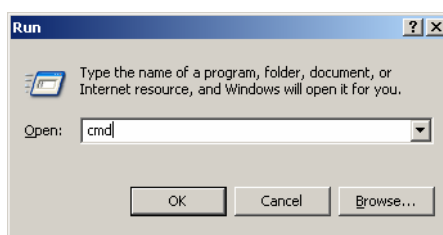


Figure 1-129. Run ... Window

- c. A "cmd.exe" command popup window is displayed. Type in **ping(space)10.10.16.1** and press **Enter**.

13. If ping reports "Request Time out" or other error, verify:

- a. The AFR-I 01 is connected to the network.
- b. That both network cables are plugged in.
- c. That the network names have been assigned to the right physical adapters. (Refer to section 10.3.2.2).

10.3.2.5 Install AutoIP script to AFR-I 01

1. Proceed to the Drive Duplicator and log on as user **usps admin** (If not already done.)
2. Open a "cmd.exe" Command window.
3. Navigate to folder C:\AutoIpXPConfiguration by typing:
cd(space)C:\AutoXPipConfiguration and press the **Enter** key.
4. Type **install_pdc_afr1.bat(space)10.10.16.211** at the command prompt and press the **Enter** key.
5. Return to the AFR-I 01 cabinet. Shutdown AFR-I 01 by selecting **Start** and **Shutdown**.
6. Click **OK**.

10.4. BACKUP OF IMS 3

The Backup of IMS 3 consists of two main steps:

- Installation of Save and Restore scripts (10.4.1)
- Backup of the system (10.4.2)

10.4.1. Install Save and Restore Scripts

The scripts for Save and Restore are part of IMS 4.0.1 delivered on the PARS IMS 4.0.1 P&DC, PARS IMS/AFR Software Installation Kit (CD): Version 4.01, (Build: 32.51), P/N 600-2553-0000DT, Volume 1 of 1 media.

NOTE

Connecting an external USB device to the computer will possibly start the auto-detect feature of the Windows system, indicated by an alert window. Windows will try to find a suitable driver for the external device. Click **OK** if the corresponding window is displayed.

1. If the window is not there, proceed to First RIC and switch mouse, keyboard, and display to First RIC.
2. If not logged on, log on to the IMS application at the First RIC as SEC Technician (Figure 1-130).
 - a. Mark the **I agree** checkbox.
 - b. In the 'Enter Logon ID' field, type **SEC Technician**.
 - c. In the 'Enter your Password' field, type the appropriate password.
 - d. Click **Logon**. The 'Site Overview' window is displayed.

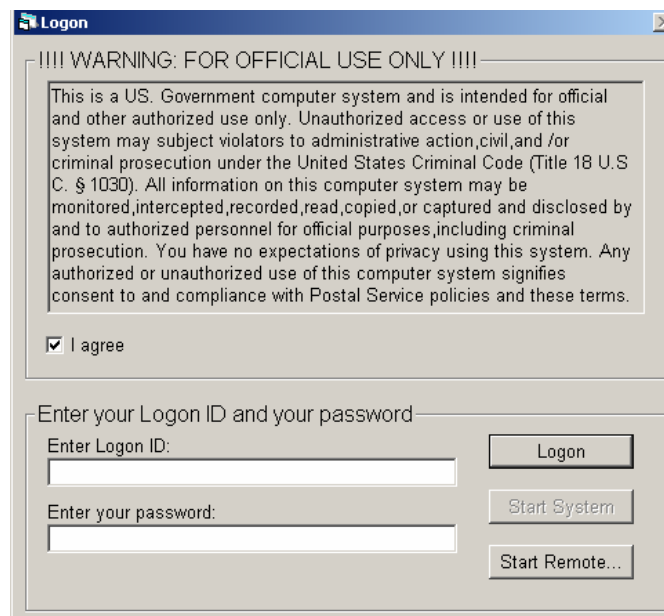


Figure 1-130. Logon Window

3. If not opened, open the Start/Stop frame by selecting **System** and **Start/Stop** on the PARS Supervisor UI menu bar (Figure 1-131).



Figure 1-131. Open Start / Stop Frame

The "Coding System" popup window is displayed (Figure 1-132).

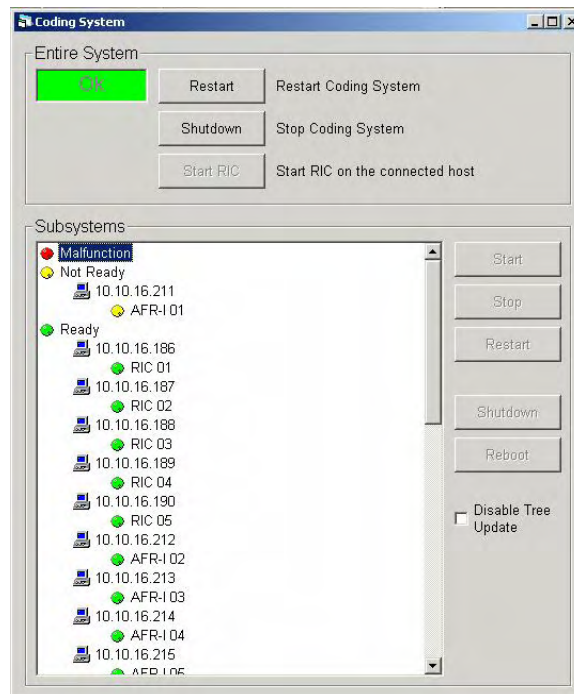


Figure 1-132. Unselected First RIC

- In the "Subsystems" pane, identify the First RICs (RIC 01) IP address and highlight it by clicking once on it (Figure 1-133).

This will enable the corresponding action buttons on the right hand side.

NOTE

The IP addresses in the figure are only examples

- Click on **Stop**.

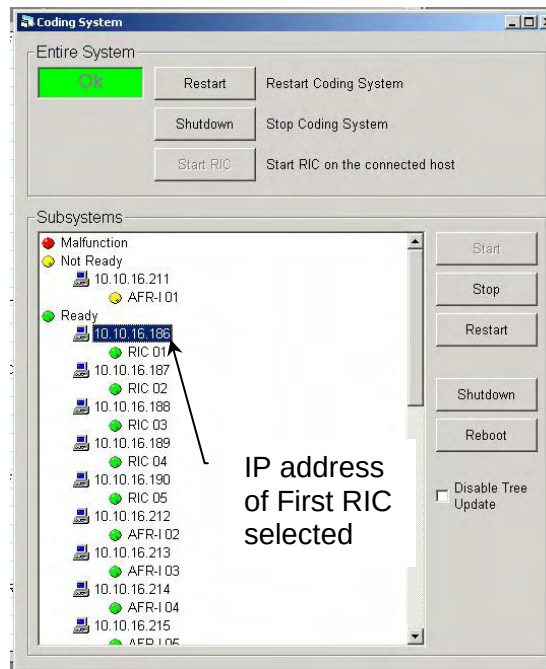


Figure 1-133. Start/Stop Window with First RIC Computer Selected

A "uicool" popup window is displayed with the message "Do you really want to execute 'Stop' on host 10.10.16.186'." (Figure 1-134).

- Click on **Yes**. This will stop the IMS application on this RIC upon confirmation.

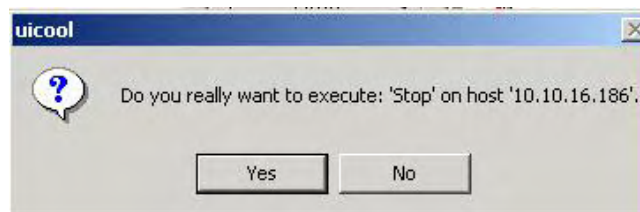


Figure 1-134. Really Stop RIC

The "Coding System" frame is empty (Figure 1-135).

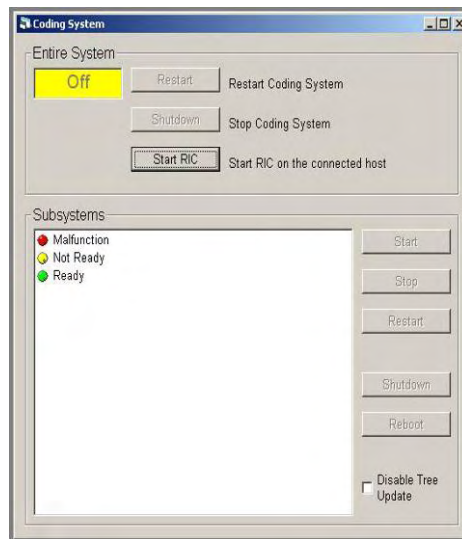


Figure 1-135. Empty Coding System Frame

7. Logoff from the PARS Supervisor UI by selecting **System** and **Logout** on the "PARS Supervisor User Interface" window menu bar (Figure 1-136).



Figure 1-136. Supervisor UI Logout function

The "Logon" dialog is displayed (Figure 1-137).

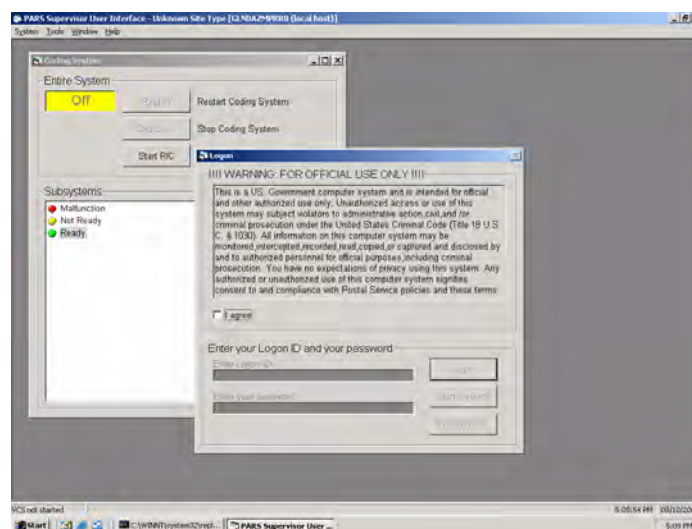


Figure 1-137. Supervisor UI Screen with Logon Window Displayed

8. Log off user 'cool':
 - a. Press **CTRL-ALT-DEL** keys simultaneously. A window is displayed asking, "What do you want the computer to do?" (Figure 1-138). **Select Log off cool** from the drop down and click on **OK**.



Figure 1-138. Log Off as User Cool

- b. The Log Off Windows dialog is displayed (Figure 1-139). Press and hold down the left **Shift** key and click **YES**. Keep the key pressed until the logon window is displayed. Ignore pop up windows with error messages.

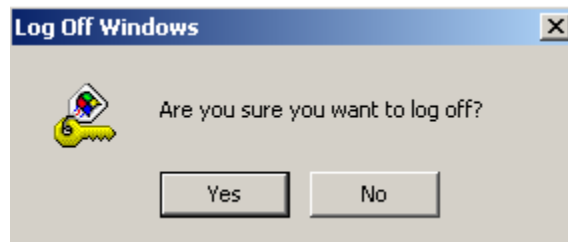


Figure 1-139. Confirm Log Off

NOTE

If system logs in again as user "cool" in the next step, simply repeat the logoff procedure.

9. Log on as "usps admin": In the "User name" field, enter **usps admin** and in the "Password" field, the appropriate password and click **OK** (Figure 1-140).



Figure 1-140. Logon as 'usps admin'

10. Connect the external USB CD/DVD drive to the First RIC computer by plugging its USB cable into the USB port, located behind the fold down door, on the front of the computer. Connect the power cable to the AC outlet on the lower right side of the cabinet.
11. Power up the USB CD/DVD drive.
12. Windows possibly encounters the USB drive.
If a "System Settings Change" window is displayed, click **No**.
13. Insert the installation media, "PARS IMS 4.0.1 P&DC, PARS IMS/AFR Software Installation Kit (CD): Version 4.01, (Build: 32.51), P/N 600-2553-000ODT, Volume 1 of 1" into the CD/DVD drive.
14. Open Windows Explorer.
15. Click on the CD drive with drive letter **D:** in the left pane of the Explorer window.
16. The content of the CD is displayed in the right pane (Figure 1-144). Double click on the **Setup_DataSave** command script in the right pane of the explorer window.

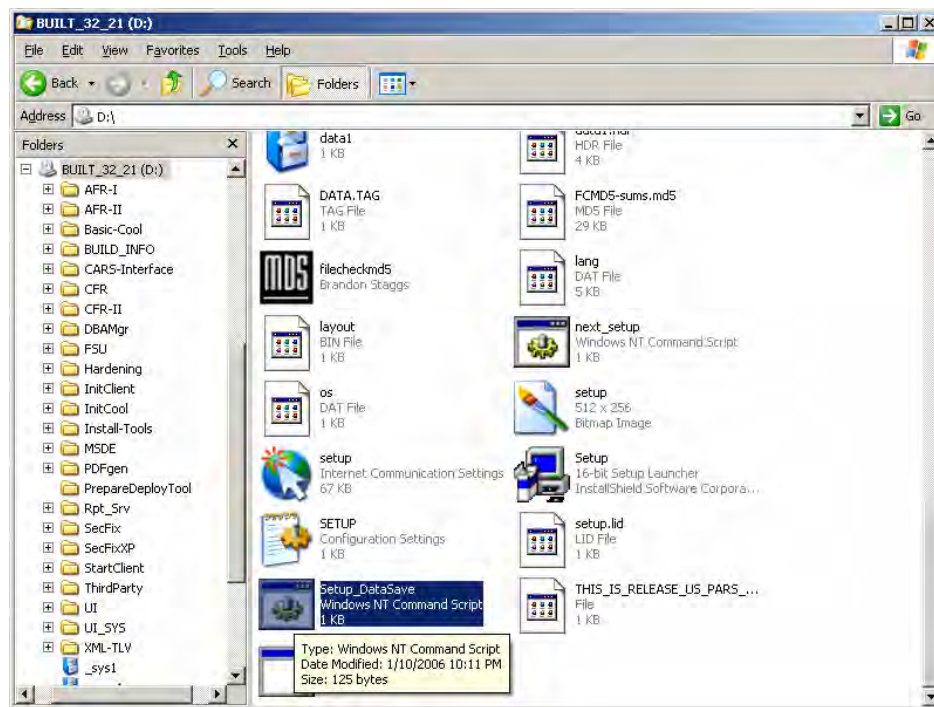


Figure 1-141. Setup_DataSave Script

17. A Command window opens and setup starts (Figure 1-142).

```

Siemens AG - IMS DataSave Application

D:\>REM this script starts DataSave to migrate data from IMS3.0 to IMS4.0
D:\>call .\Install-Tools\DataSave\setup_data_save.cmd

#####
#      IMS DataSave      (c) 2005 Siemens AG      #
#####

Release Notes:
-----
The DataSave application saves the data of a IMS 3.0
installation at a central storage location.
After upgrading the system to IMS 4.0 then this data
can be restored into the databases again.

Press any key to continue . . .
  
```

Figure 1-142. DataSave Setup Window Part I

18. Press the **Enter** key at the prompt and continue (Figure 1-143).

```

Siemens AG - IMS DataSave Application

D:\>REM this script starts DataSave to migrate data from IMS3.0 to IMS4.0
D:\>call .\Install-Tools\DataSave\setup_data_save.cmd

#####
#      IMS DataSave      (c) 2005 Siemens AG      #
#####

Release Notes:
-----
The DataSave application saves the data of a IMS 3.0
installation at a central storage location.
After upgrading the system to IMS 4.0 then this data
can be restored into the databases again.

Press any key to continue . . .

-checking if target machine is an IMS config server
-checking directory structure on update media

The following files will be copied to the config server:
- c:\cfg_srv\cmn_ntpc\bin\cygwin1.dll
- c:\cfg_srv\cmn_ntpc\bin\gzipn.exe
- c:\cfg_srv\cmn_ntpc\bin\set_color.exe
- c:\cfg_srv\cmn_ntpc\bin\nov.exe
- c:\cfg_srv\install_tools\bin\backup_clients.bat
- c:\cfg_srv\install_tools\bin\backup_clients_additional.bat
- c:\cfg_srv\install_tools\bin\backup_clients_finished.bat
- c:\cfg_srv\install_tools\bin\backup_show_progress.bat
- c:\cfg_srv\install_tools\bin\backup_single_client.bat
- c:\cfg_srv\install_tools\bin\restore_clients.bat
- c:\cfg_srv\install_tools\bin\restore_clients_additional.bat
- c:\cfg_srv\install_tools\bin\restore_clients_finished.bat
- c:\cfg_srv\install_tools\bin\restore_show_progress.bat
- c:\cfg_srv\install_tools\bin\restore_single_client.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_clients.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_clients_additional.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_clients_finished.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_show_progress.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_single_client.bat

*****
This application is only valid for base load:
IMS 3.0.0 / build 31.30
*****

Press [CTRL-C] to exit, or [Enter] start DataSave installation ...
  
```

Figure 1-143. DataSave Setup Windows Part II

19. Press the **Enter** key at the prompt and continue (Figure 1-144).

```

C:\ Command Prompt
- c:\cfg_srv\install_tools\bin\backup_show_progress.bat
- c:\cfg_srv\install_tools\bin\backup_single_client.bat
- c:\cfg_srv\install_tools\bin\restore_clients.bat
- c:\cfg_srv\install_tools\bin\restore_clients_additional.bat
- c:\cfg_srv\install_tools\bin\restore_clients_finished.bat
- c:\cfg_srv\install_tools\bin\restore_show_progress.bat
- c:\cfg_srv\install_tools\bin\restore_single_client.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_clients.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_clients_additional.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_clients_finished.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_show_progress.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_single_client.bat
backing up current IMSversion.cfg file ...
done.

installing new files from D:\Install-Tools\DataSave\ ...
- c:\cfg_srv\cmn_ntpc\bin\cygwin1.dll
- c:\cfg_srv\cmn_ntpc\bin\gzipn.exe
- c:\cfg_srv\cmn_ntpc\bin\set_color.exe
- c:\cfg_srv\cmn_ntpc\bin\now.exe
- c:\cfg_srv\install_tools\bin\backup_clients.bat
- c:\cfg_srv\install_tools\bin\backup_clients_additional.bat
- c:\cfg_srv\install_tools\bin\backup_clients_finished.bat
- c:\cfg_srv\install_tools\bin\backup_show_progress.bat
- c:\cfg_srv\install_tools\bin\backup_single_client.bat
- c:\cfg_srv\install_tools\bin\restore_clients.bat
- c:\cfg_srv\install_tools\bin\restore_clients_additional.bat
- c:\cfg_srv\install_tools\bin\restore_clients_finished.bat
- c:\cfg_srv\install_tools\bin\restore_show_progress.bat
- c:\cfg_srv\install_tools\bin\restore_single_client.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_clients.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_clients_additional.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_clients_finished.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_show_progress.bat
- c:\cfg_srv\install_tools\bin\undo_gzip_single_client.bat
done.

registering this update version:
[DataSave_300_to_400] version=1
done.

*****
*** IMS DataSave files installed ***
*****

you can now run DataSave as described in the SUD.
- backup_clients \\IP_ADDRESS_OF_SERVER\c$\DIRNAME
or
- restore_clients \\IP_ADDRESS_OF_SERVER\c$\DIRNAME

Press any key to continue . . .

```

Figure 1-144. DataSave Setup Finished

20. Press the **Enter** key to close the Command window.

10.4.2. Start Backup

The Backup has to be started on the First RIC.

The configuration file "siteconfig.ini" determines which client's data has to be saved from all RIC computers and all computers running an Image Handler (IH).

There are principally two different operating modes:

- Normal mode: All eligible clients are saved.
- SingleClient mode: Only the denoted client will be saved. (Single client mode is only used if the backup of a computer in normal mode failed.)

NOTE

After installing DataSave scripts, you are still logged in as 'usps admin'.

1. On the Windows taskbar, select **Start** and **Run** (Figure 1-145).

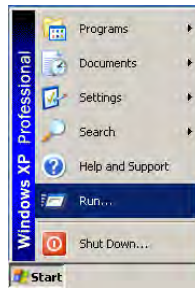


Figure 1-145. Run...

2. The "Run" popup is displayed (Figure 1-146). Type in **cmd** and click on **OK**.

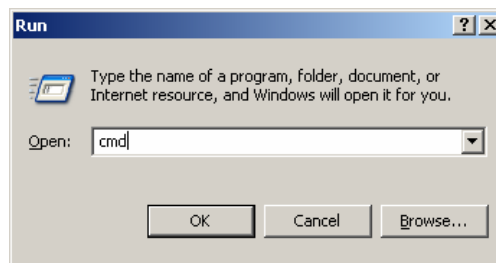


Figure 1-146. Run ... Window

3. A "cmd.exe" command DOS window is displayed (Figure 1-147). Type **cd**_(space)**\cfg_srv\install_tools\bin**.
4. Press the **Enter** key.

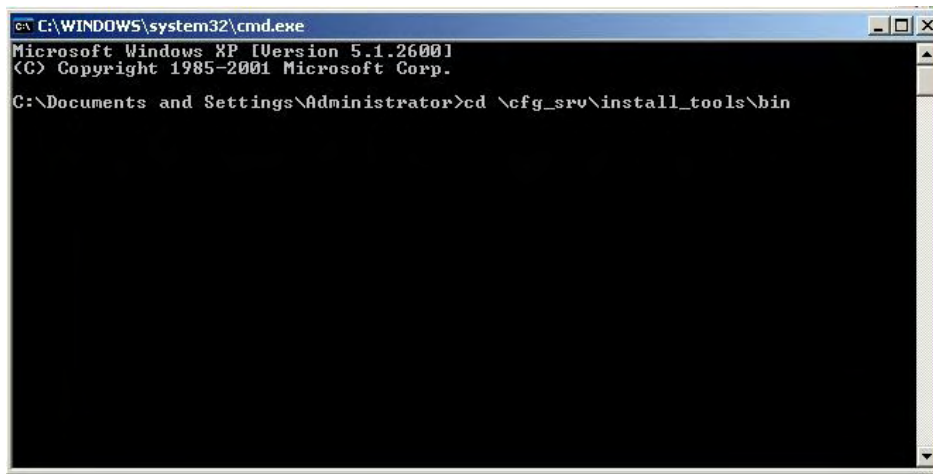


Figure 1-147. DOS Windows Install Folder

The Command window prompt will change to "c:\cfg_srv\install_tools\bin" (Figure 1-148).

5. Type in **backup_clients**_(space)**\\10.10.16.1\c\$\IMS3_Backup** and press the **Enter** key to start backup of all clients having eligible data.

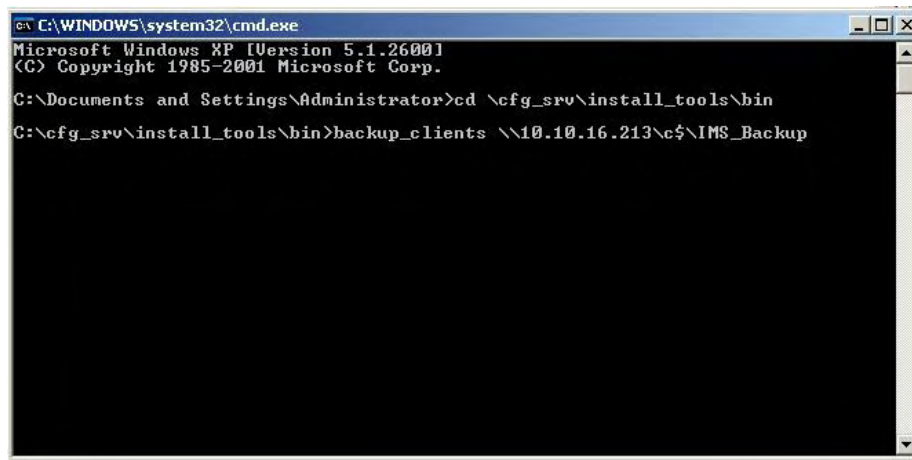


Figure 1-148. Start Backup

NOTE

The command line window may be hidden by the backup status window. If you see the DOS prompt in the status window, activate the command line window with a click on the appropriate icon in the task bar.

Sometimes it is necessary to scroll down through the progress windows to see DOS prompt.

The backup starts, loops through `siteconfig.ini`, trying to connect to each computer (Figure 1-149).

```
C:\connectivity_show_progress of backup_clients
```

```
Tue Jan 17 09:17:10 2006 -- =====  
hostname      client_reachable    backup_server_reachable    ready    exit_code  
SYRCNYMRIC0   1                    0                    0        0  
SYRCNYMRIC1   1                    0                    0        0  
SYRCNYMAF01   1                    0                    0        0  
SYRCNYMAF16   1                    0                    0        0  
  
Tue Jan 17 09:17:21 2006 -- =====  
hostname      client_reachable    backup_server_reachable    ready    exit_code  
SYRCNYMRIC0   1                    1                    1        0  
SYRCNYMRIC1   1                    1                    1        0  
SYRCNYMAF01   1                    1                    1        0  
SYRCNYMAF16   1                    1                    1        0
```

```
C:\cfg_srv\install_tools\bin>
```

Figure 1-149. Connectivity Test

If one or more clients have connectivity problems, the user will be prompted to continue processing or to abort.

NOTE

Since AFR-I 01 is intentionally powered off, that computer will be indicated as failed. There is no interaction required regarding AFR-I 01.

6. Write down the hostnames of the computers that failed to connect, except that of AFR-I 01 (Figure 1-150).

```
C:\>\\10.14.8.97:connectivity_single_client.bat \\10.14.8.27\c$\IMS3_Backup InitClient2_RIC2_IH2_UI2...

using utility output ini file for ok status computers:
C:/cfg_srv/install_tools/bin/foreach_comp_goods.ini

using utility output ini file for bad status computers:
C:/cfg_srv/install_tools/bin/foreach_comp_bads.ini

appending to logfile:
c:/cfg_srv/install_tools/foreach_comp.log

----- ip=10.14.8.73, name=GLNDAZMPR11

----- ip=10.14.8.74, name=GLNDAZMPR12

----- ip=10.14.8.98, name=REC-VDTI00

----- ip=10.14.8.75, name=REC-VDTI01

----- ip=10.14.8.76, name=REC-VDTI02

WARN: system remote_cool_stop_special.bat 10.14.8.76 REC-VDTI02 failed: exit_val
ue=1

----- ip=10.14.8.96, name=GLNDAZMPR09

----- ip=10.14.8.97, name=GLNDAZMPR10

*****
*****
*****      *****
*****      *****
*****    foreach_comp had ERRORS !   *****
*****      *****
*****      *****
*****
*****
Not all computers are stopable/reachable
Do you want to continue [y/n] n y
```

Figure 1-150. Foreach comp had Errors

7. Enter **Y** and press **Enter** to continue data save

NOTE

If the IMS application cannot be stopped on one or more clients, the user will be prompted to continue processing or to abort.

8. Write down the hostnames of the computers that failed to stop.
9. Enter **Y** and press **Enter** to continue data save.

The meaning of the different colors is explained in the table Table 1-4.

Table 1-4. Meaning of Colors in the Status Display of Connectivity Progress

Text / Back-ground	Red	Green	White	Bright white
Blue		The client has completed the connectivity test 1) Successfully exit_code = 0 ready = 1 some counters>0 2) Client has been commented out "not used" appears in siteconfig.cfg		
White				
bright white	The client has been completed the connectivity test, but it was not successfully exit_code != 0			
Black			Logfile-for client has been created but no separate action has been completed. (No counters in the line is set)	At least one separate action has been completed.

A new DOS window is displayed, showing the status of the backup (Figure 1-151).

```

C:\WINNT\system32\cmd.exe
SYRCNYMRIC0 12 1 0 1 7 11 0 0 0
SYRCNYMRIC1 3 1 0 1 0 18 1 1 0
SYRCNYMAF01 4 0 0 1 0 8 1 1 0
SYRCNYMAF16 4 0 0 1 0 8 1 1 0

Mon Jan 16 16:24:27 2006 -- =====
hostname gzipt detach trylink links xcopies copy_gz unlink ready exit_code
SYRCNYMRIC0 12 1 0 1 7 11 0 0 0
SYRCNYMRIC1 3 1 0 1 0 18 1 1 0
SYRCNYMAF01 4 0 0 1 0 8 1 1 0
SYRCNYMAF16 4 0 0 1 0 8 1 1 0

Mon Jan 16 16:24:38 2006 -- =====
hostname gzipt detach trylink links xcopies copy_gz unlink ready exit_code
SYRCNYMRIC0 12 1 0 1 7 11 0 0 0
SYRCNYMRIC1 3 1 0 1 0 18 1 1 0
SYRCNYMAF01 4 0 0 1 0 8 1 1 0
SYRCNYMAF16 4 0 0 1 0 8 1 1 0

Mon Jan 16 16:24:48 2006 -- =====
hostname gzipt detach trylink links xcopies copy_gz unlink ready exit_code
SYRCNYMRIC0 12 1 0 1 7 11 0 0 0
SYRCNYMRIC1 3 1 0 1 0 18 1 1 0
SYRCNYMAF01 4 0 0 1 0 8 1 1 0
SYRCNYMAF16 4 0 0 1 0 8 1 1 0

Mon Jan 16 16:24:59 2006 -- =====
hostname gzipt detach trylink links xcopies copy_gz unlink ready exit_code
SYRCNYMRIC0 12 1 0 1 7 29 1 1 0
SYRCNYMRIC1 3 1 0 1 0 18 1 1 0
SYRCNYMAF01 4 0 0 1 0 8 1 1 0
SYRCNYMAF16 4 0 0 1 0 8 1 1 0

C:\cfg_srw\install_tools\bin>

```

Figure 1-151. Backup Status Window

The status chart is permanently updated. At the end of the backup, it might be necessary to scroll down to see the DOS prompt that indicates the end of the backup process.

The meaning of the different colors are described in Table 1-5.

Table 1-5. Colors of backup progress

Text / Back-ground	Red	Green	White	bright white
Blue		The client has been completed 1) Successfully exit_code = 0 ready = 1 some counters>0 2) Client has been commented out in siteconfig.cfg “not used” appears		
White				
bright white	The client has been completed, but not successfully exit_code != 0			
Black			Logfile-for client has been created but separate action has not been completed. (All counters in the line are 0)	At least one separate action has been completed. At least one counter is greater than 0 in the line.

10. As described in step 6, note the hostnames of the computers where the data save failed.

11. If the backup ran without any errors, proceed with step 15.

12. If an error occurred for any computer, repeat the data save for this single computer.

NOTE

Hostnames are case sensitive. Always enter these names in uppercase.

13. In the Command window, type in:

backup_clients_(space)\\10.10.16.1\c\$\IMS3_Backup_(space)(hostname of failed computer) and press the **Enter** key.
(hostname of failed computer) - insert the hostname of the failed computer
e.g. if SYRCNYMAF16 failed, the command would be:

backup_clients_(space)\\10.10.16.1\c\$\IMS3_Backup_(space)SYRCNYMAF16.)

NOTE

The same backup destination (\\10.10.16.1\c\$\IMS3_Backup) must be used for all data save if for all clients, or a single client.

14. Repeat step 12 for every computer where an error occurred. If the error re-appears, verify that the respective computer is powered on and connected to the network. Then try again.
15. After data save has completed, close the Command window with a click on the **X** in the upper right corner.

10.4.3. Backup of IMS 3.0 siteconfig.ini File

1. Disconnect the USB CD/DVD drive.

NOTE

If an "Unsafe Removal of Device" popup window is displayed, click on **OK** to close window.

2. Connect the USB floppy drive USB cable to the USB port on the front of the First RIC.
3. Insert a formatted disk into the drive.
4. Open Windows explorer. Select the folder **c:\cfg_srv** from the left pane and locate the file **siteconfig.ini** in the right pane (Figure 1-152).
5. Right click on the file and select **copy** in the popup menu.

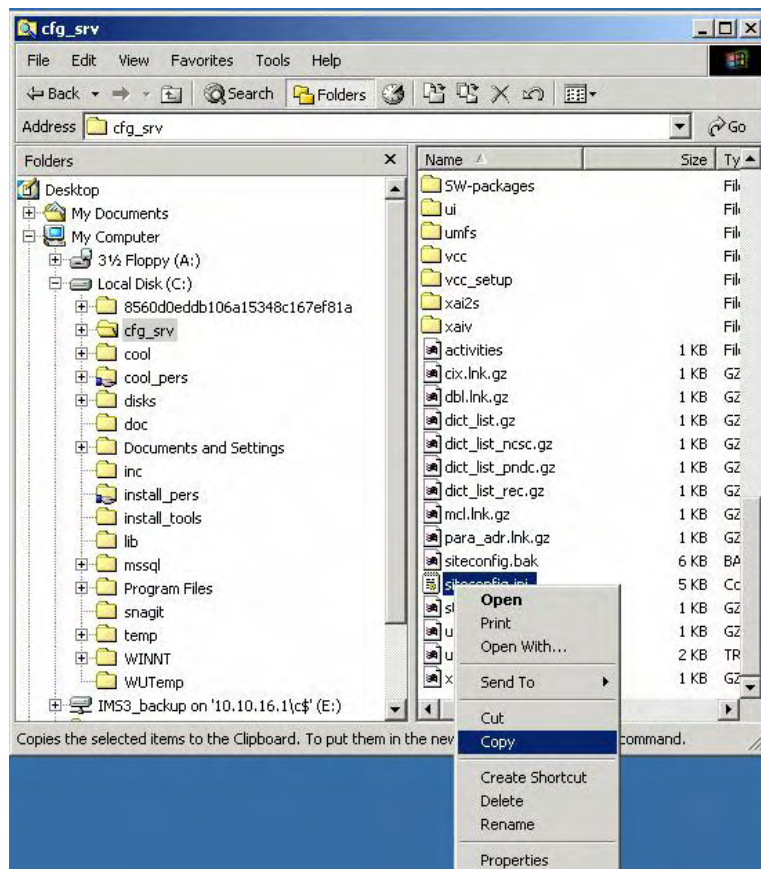


Figure 1-152. Copy SiteConfig.ini

6. Click on **Floppy (A:)** in the left pane (Figure 1-153).
7. Right click in the right pane and select **paste** in the popup menu. A Copy window is opened and the file is copied to the floppy disk.

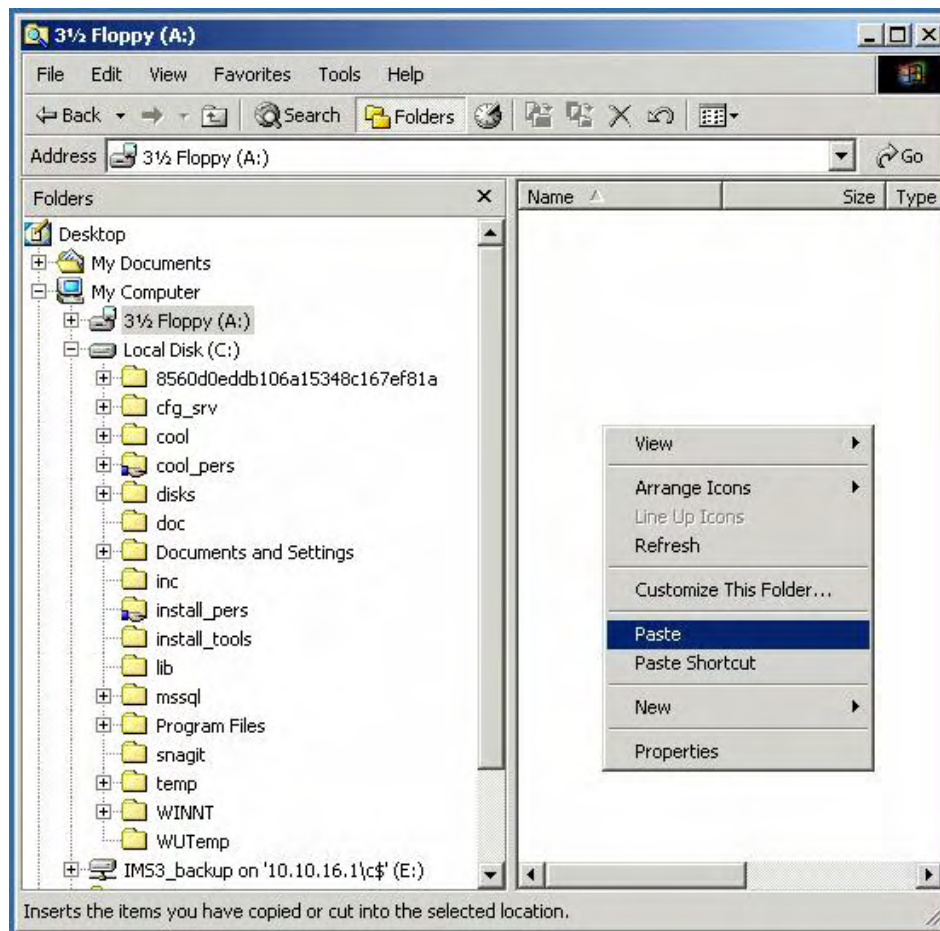


Figure 1-153. Paste siteconfig.ini to Floppy

8. Remove the diskette from the drive and unplug the drive's USB cable.

NOTE

If an "Unsafe Removal of Device" popup window is displayed, click on **OK** to close window.

9. Label the backup diskette "IMS 3 siteconfig and install backup" and store in a safe place where it is available for future use during the installation process.

10.4.4. Print the Existing File siteconfig.ini

1. Open Windows Explorer.
2. Select **c:\cfg_srv** from the left pane and locate the file **siteconfig.ini** in the right frame.
3. Right click on the file and in popup menu and select **Print**. Siteconfig.ini will be printed on system printer, typically located in the Supervisor UI cabinet.
4. Retrieve the printout.
5. Move to all computers and turn them off.

10.5. RIC / AFR / SUI CLONING

10.5.1. Drive Cloning

NOTE

Before cloning disks, verify that 'Source Drive' and 'Destination Drive' are positioned as indicated in Figure 1-154 . Otherwise, the source disk is destroyed. If drives do not match the drive positions in the figure below, call the MTSC to change the drive wiring or mark your actual source and destination drive positions with a sticker.

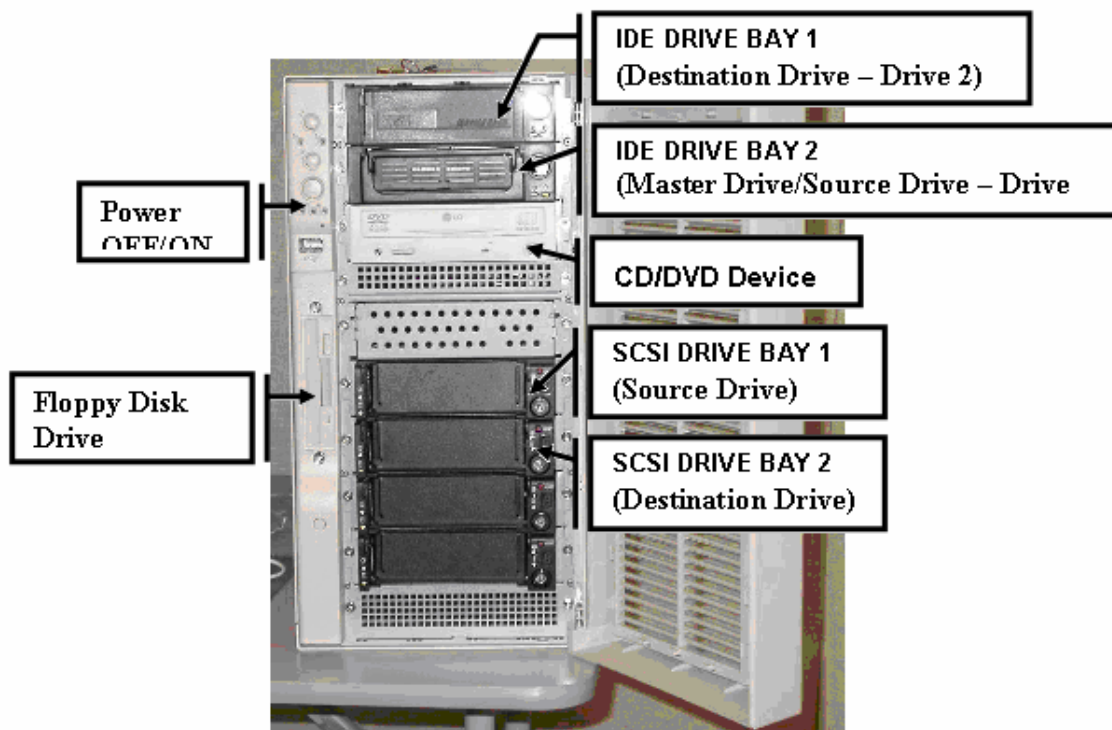


Figure 1-154. Drive Duplicator Phase I Components

If in doubt about the content of a disk, the disk can be verified, using the steps below:

1. Boot from Ghost floppy.
2. Select **Local**, **Disk**, and **From Image** from the menu within Ghost (Figure 1-155).

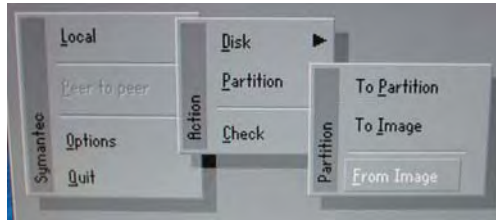


Figure 1-155. Ghost Disk Verification I

3. A file selection dialog window opens (Figure 1-156).

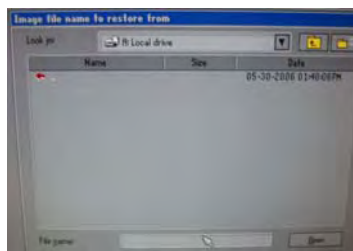


Figure 1-156. Ghost Disk Verification II

4. Click on down arrow (▼) to display the disk list (Figure 1-157).

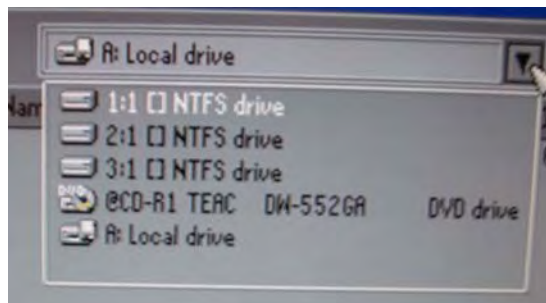


Figure 1-157. Ghost Disk Verification III

5. Select disk to be verified and the content of the disk is displayed. A disk (Master disk), using Windows XP has the folder “IMS_AutoIP” and “Windows” (Figure 1-158). This is the disk that will be cloned.

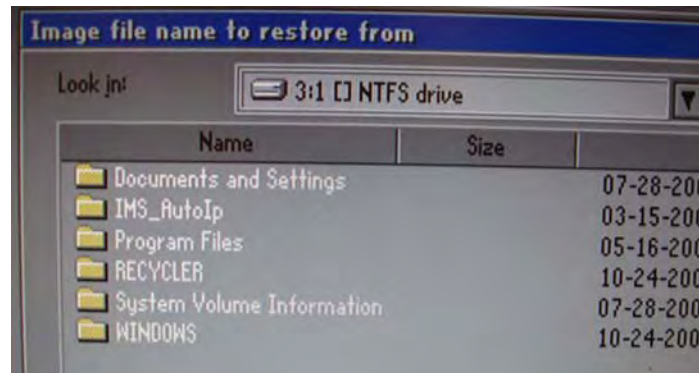


Figure 1-158. Ghost Disk Verification IV

6. The disk using the old Windows 2000 and IMS has the folder “cool”, “cool_pers” and “WINNT” (Figure 1-159).

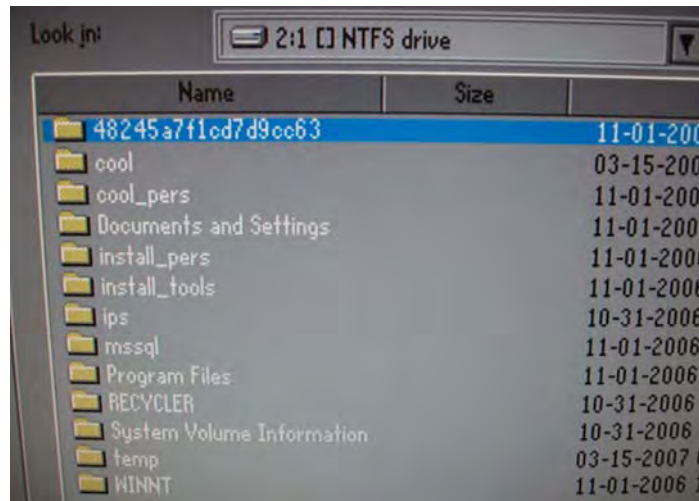


Figure 1-159. Ghost Disk Verification V

For Phase I Hardware, proceed with section 10.5.1.1, Duplicating Phase I Hard Disks.

For Phase II Hardware proceed with section 10.5.1.2, Duplicating Phase II Hard disks on page 112.

10.5.1.1 Duplicating Phase I Hard Disks

Before proceeding with the cloning processes, refer to Figure 1-160 to become familiar with the Drive Duplicator component locations.

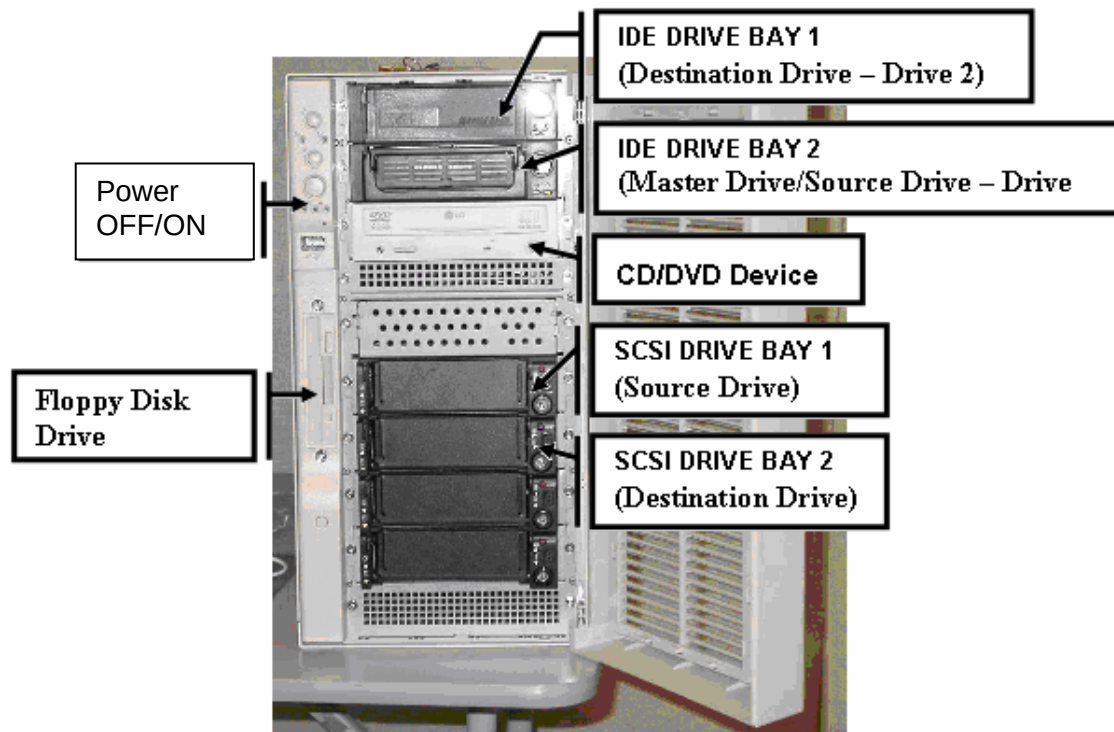


Figure 1-160. Drive Duplicator Phase I Components

Cloning of IMS SCSI hard drives

1. With the Drive Duplicator powered OFF, unlock and remove all hard drives. The drive from the IDE DRIVE BAY 2 (2nd bay from top) holds the Drive Duplicators Operator System; keep it separate and secure.
2. Insert the AFR-I 01 drive as source hard drive in SCSI Drive Bay 1.
3. Insert the destination SCSI hard drive into SCSI Drive Bay 2.

NOTE

If the destination drive is an IDE drive from a Supervisor UI computer (having different form), insert it into the topmost IDE DRIVE BAY 1

NOTE

To save time, it is possible to insert a destination disk in each SCSI Drive Bay. You may clone up to three disks without rebooting the drive duplicator.

4. Secure all hard drives in the bays by locking the key switches.
5. Insert "PARS IMS 4.0.1 P&DC, PARS IMS Ghost Boot Disk for Drive Duplicator (Floppy Disk): Volume 1 of 2, Version N/A, (Build: N/A), P/N 66.6015.160-01.ODT" into the Floppy drive bay.
6. Power ON the Drive Duplicator and wait for the system to load. The "PC DOS 7.1 Startup Menu" is displayed (Figure 1-161).

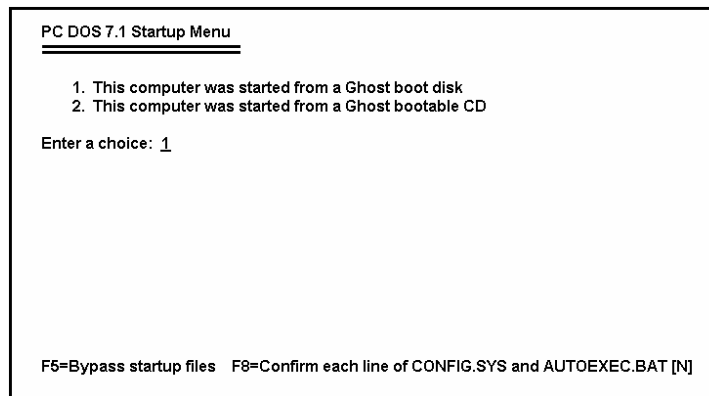


Figure 1-161. Startup Menu

7. Press the **Enter** key on the keyboard to select Option 1 and wait until the dialog in Figure 1-162 is displayed.

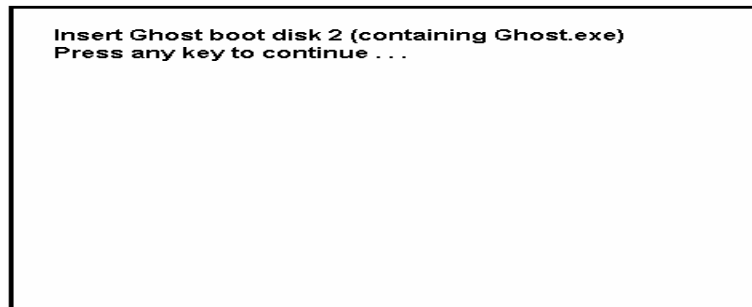


Figure 1-162. Boot Disk #2

8. Remove Ghost Boot Disk 1 of 2 from the Floppy drive bay and insert ""PARS IMS 4.0.1 P&DC, PARS IMS Ghost Boot Disk for Drive Duplicator (Floppy Disk): Volume 2 of 2, Version N/A, (Build: N/A), P/N 66.6015.160-02.ODT" **Error! Reference source not found.**
9. Press the **Enter** key on the keyboard to continue and wait for Ghost to load.

If the destination hard drive is not yet marked by the Ghost program, a “License agreement warning” dialog is displayed (Figure 1-163).

10. Click on **Continue without marking drives**.

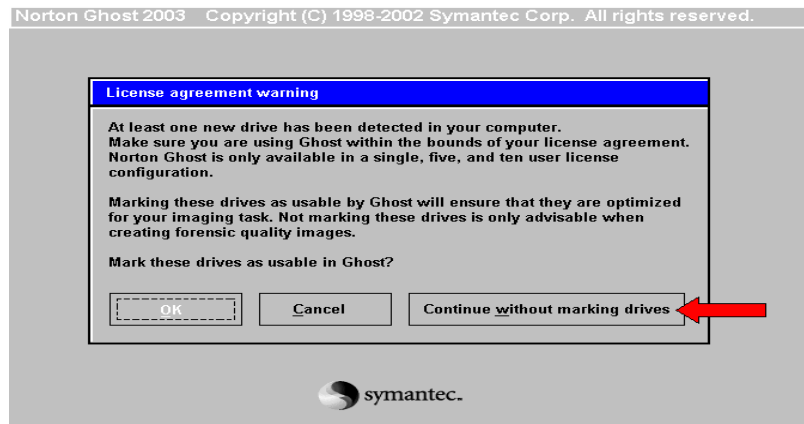


Figure 1-163. License Agreement

The “About Norton Ghost” window is displayed (Figure 1-164).

11. Click on **OK** to continue from the About Norton Ghost prompt.

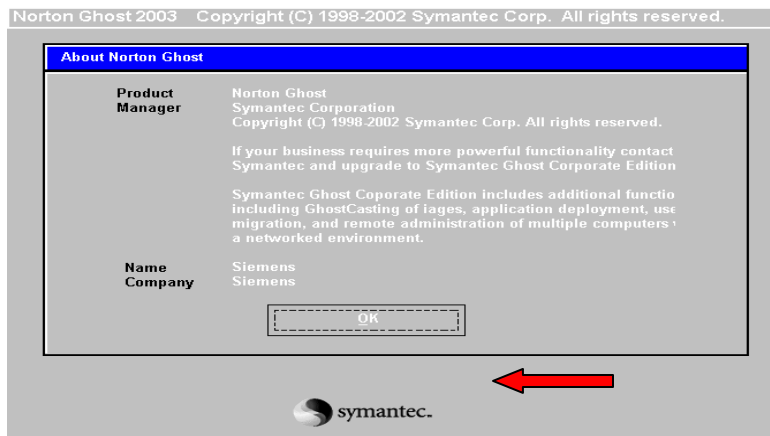


Figure 1-164. About Norton Ghost

The Symantec menu is displayed (Figure 1-165).

NOTE

If you have inserted a destination disk in each SCSI Drive Bay, perform steps 12 through 17. In this case, up to three drives will be displayed in the selection screens for the destination drive.

12. To clone a source hard drive to another hard drive, select **Local**, **Disk**, and **To Disk** on the Symantec menu bar.

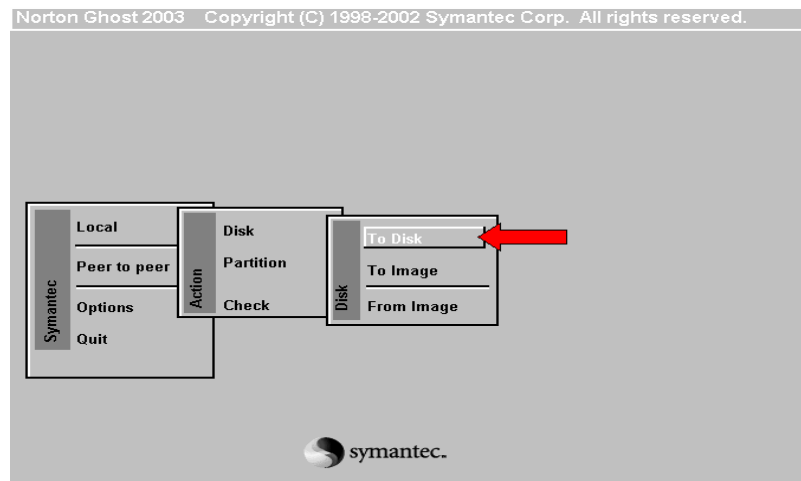


Figure 1-165. Symantec Menu

The "Select local source drive" dialog is displayed (Figure 1-166).

13. In the "Drive" section, verify that **Drive 1** is highlighted as source drive. Click on **OK** to continue.

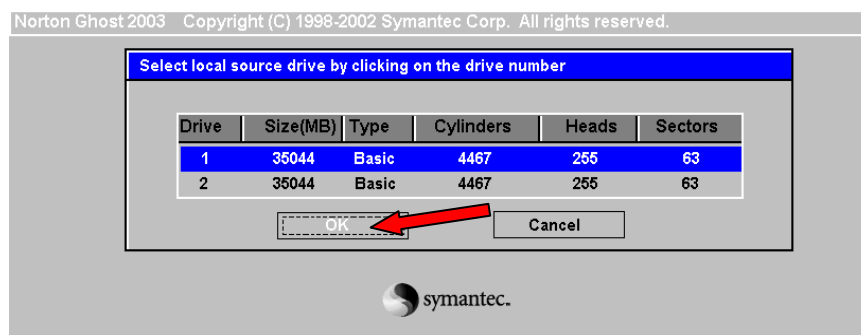


Figure 1-166. Source Drive

The “Select local destination drive” dialog is displayed (Figure 1-167).

14. In the “Drive” section, verify that **Drive 2** is highlighted as destination drive. Click on **OK** to continue.

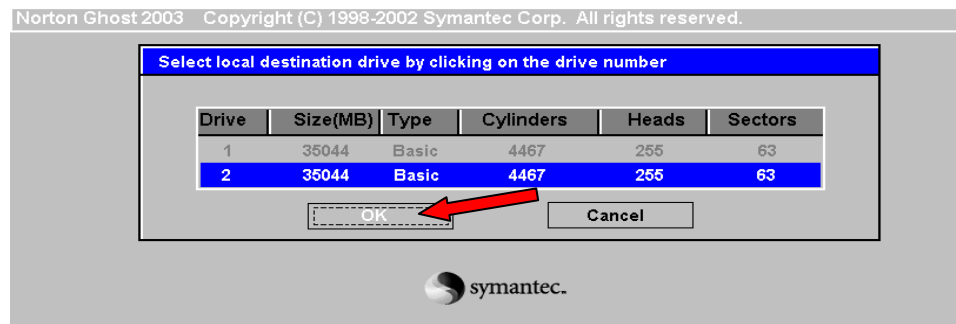


Figure 1-167. Destination Drive Selection

The “Destination Drive Details” window will be displayed (Figure 1-168).

NOTE

Figure 1-168 is an example. The Drive Details may vary depending on the destination hard drive.

15. Click on **OK**.

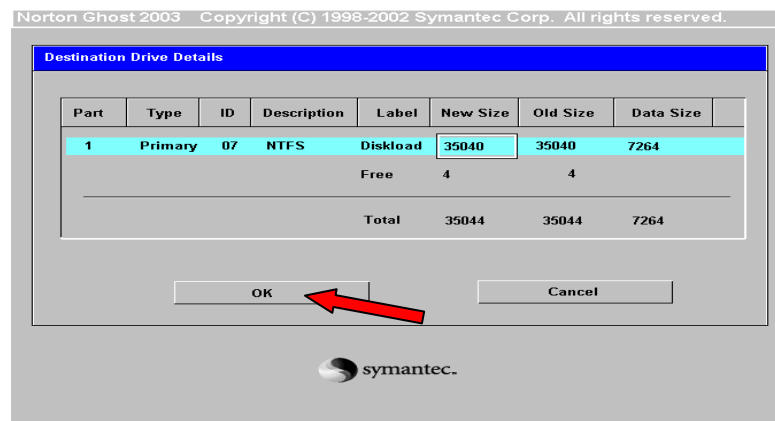


Figure 1-168. Destination Drive Details

When ready, a “Question” dialog is displayed (Figure 1-169).

16. Click **Yes** to start the disk cloning process.

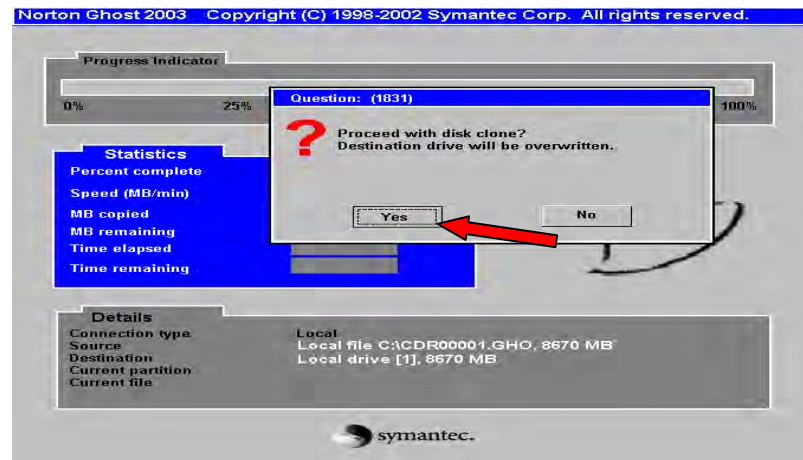


Figure 1-169. Proceed with Disk Clone

The “Clone Progress Indicator” is displayed (Figure 1-170)

NOTE

The details displayed in Figure 1-170 are an example. Details may vary. Wait until the cloning process is finished.

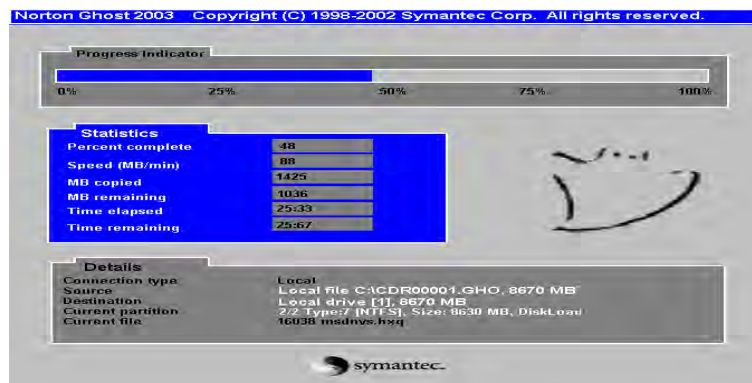


Figure 1-170. Clone Progress Indicator

When cloning process is completed, a “Span Volume [1] Done” confirmation dialog is displayed (Figure 1-171).

17. Click on **Continue**.

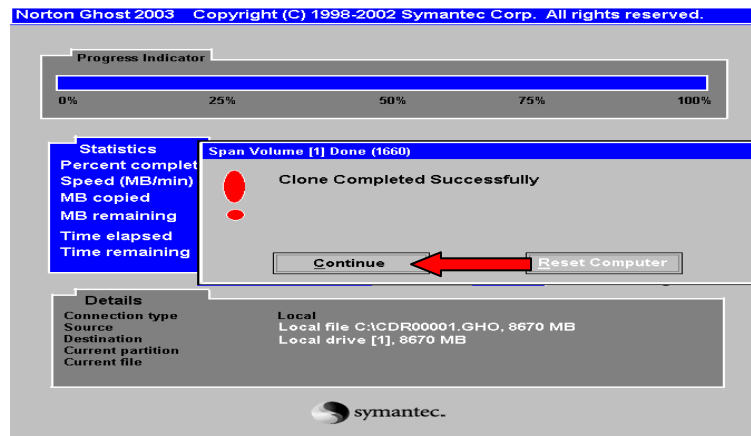


Figure 1-171. Clone Completed

The Ghost Menu is displayed (Figure 1-172).

18. Click on **Quit** to exit Ghost.



Figure 1-172. Quit Ghost

19. If more than one disk is being cloned at a time, go to step 12 until you have cloned the last inserted disk. After cloning the last inserted disk, continue with the next step.

A “Quit Norton Ghost” window is displayed stating: “Are you sure you want to quit?” (Figure 1-173).

20. Click on **Yes** and remove Ghost Boot Disk 2 of 2 from the Floppy disk drive.

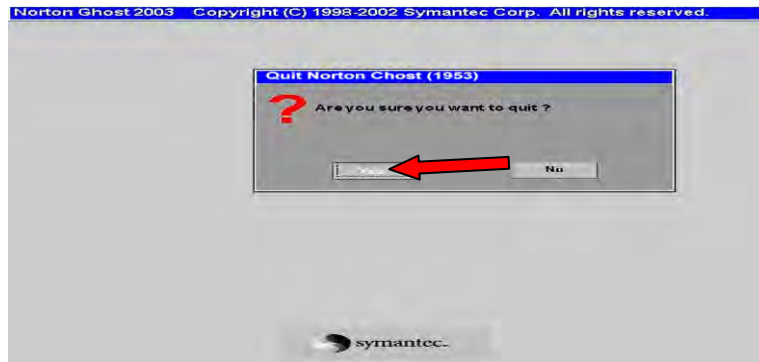


Figure 1-173. Confirm Quitting Norton Ghost

21. Power OFF the Drive Duplicator. Unlock and remove the destination hard drive.
22. Insert removed disks into their appropriate computer and switch power on at the specific computer.
23. Repeat steps 3 through 21 for all remaining IMS hard drives
24. Proceed with section 10.5.2, Verification of Cloning” on page 119.

10.5.1.2 Duplicating Phase II Hard Disks

NOTE

Before cloning disks, verify that 'Source Drive' and 'Destination Drive' are positioned as indicated in Figure 1-174. Otherwise, it is possible that the source disk could be destroyed. If drives do not match the drive positions in Figure 1-174, call the MTSC to change the drive wiring or mark your actual source and destination drive positions with a sticker.

If the P&DC site is equipped with a Phase II Drive Duplicator and IMS computers, perform drive cloning according to this section.

Before proceeding to the cloning processes, refer to Figure 1-174 to become familiar with the PARS Phase-II Drive Duplicator component locations.

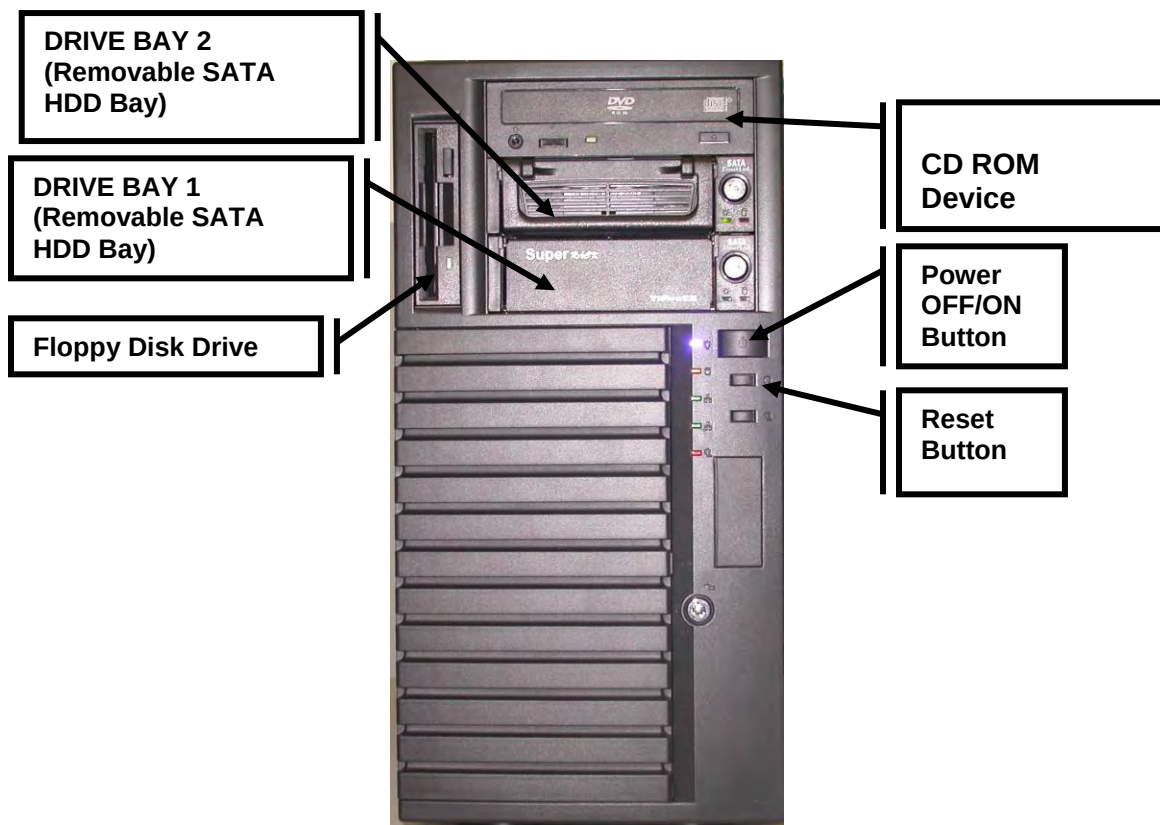


Figure 1-174. PARS Phase-II Drive Duplicator Components

Hard drive cloning

1. Power off the Drive Duplicator.
2. Insert the AFR-I 01 Source Hard Drive in Bay 1 (bottom).
3. Insert the Destination Hard Drive in Bay 2 (top).
4. Insert the floppy disk labeled "PARS IMS 4.0.1 P&DC, PARS IMS Ghost Boot Disk for Drive Duplicator (Floppy Disk): Volume 1 of 2, Version N/A, (Build: N/A), P/N 66.6015.160-01.ODT" into the Floppy drive bay.

5. Power ON the Drive Duplicator and wait for the system to load. The “PC DOS Startup Menu” window is displayed (Figure 1-175).
6. Press the **Enter** key on the keyboard to select option 1.

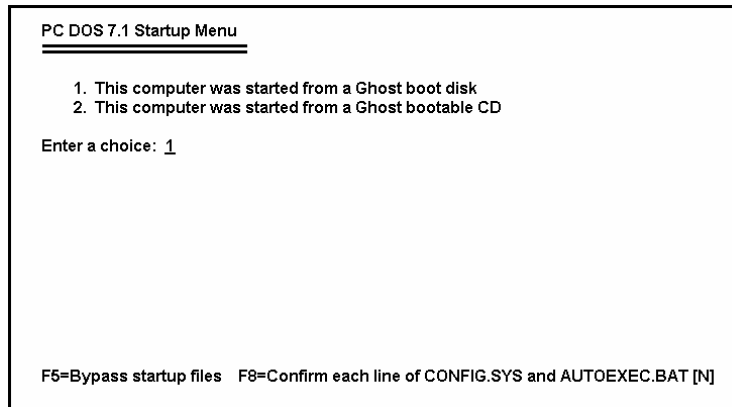


Figure 1-175. Startup Menu

A “Ghost Boot disk” dialog is displayed (Figure 1-176).

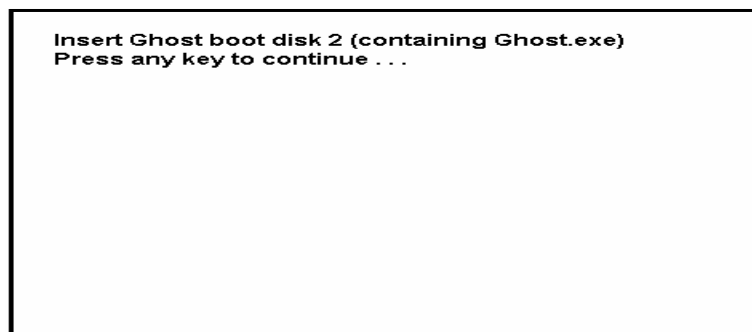


Figure 1-176. Boot Disk #2

7. Remove “Ghost Boot Disk 1 of 2” from the Floppy drive bay and insert “PARS IMS 4.0.1 P&DC, PARS IMS Ghost Boot Disk for Drive Duplicator (Floppy Disk): Volume 2 of 2, Version N/A, (Build: N/A), P/N 66.6015.160-02.ODT.
8. Press the **Enter** key on the keyboard to continue and wait for Ghost to load.

If the destination hard drive is not yet marked by the Ghost program, a “License agreement warning” window will be displayed (Figure 1-177).

9. Click on **Continue without marking drives** to continue.

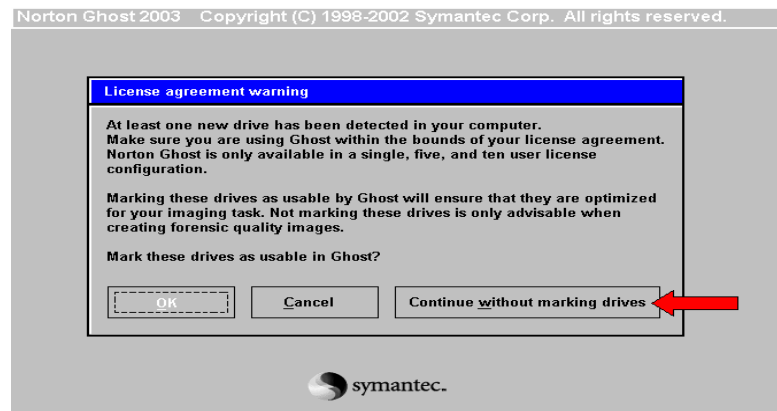


Figure 1-177. License Agreement

10. Click **OK** to continue from the About Norton Ghost prompt. The “About Norton Ghost” dialog is displayed (Figure 1-178). Click on **OK**.

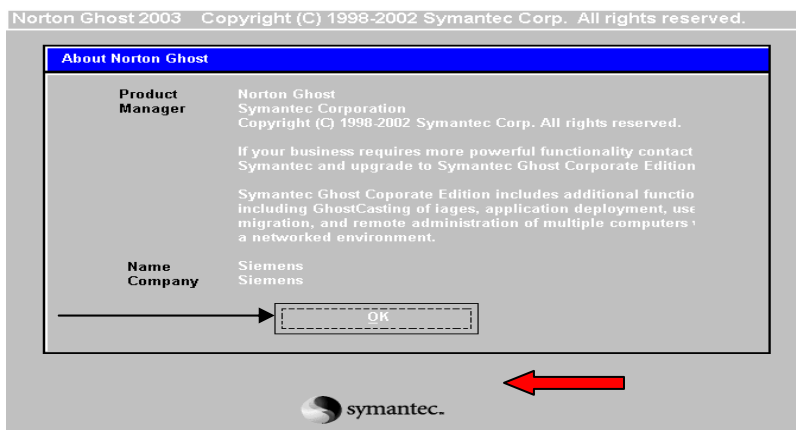


Figure 1-178. About Norton Ghost

The Symantec menu is displayed (Figure 1-179)

11. To clone a source hard drive to another hard drive, select **Local, Disk, and To Disk** on the Symantec menu bar.

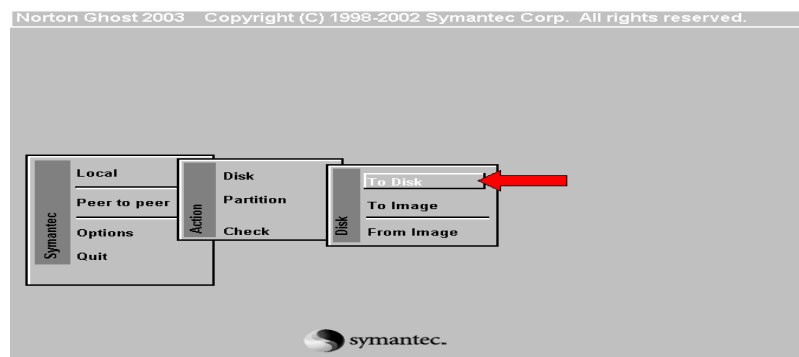


Figure 1-179. Symantec Menu

The "Select local source drive" dialog is displayed (Figure 1-180).

12. Select (highlight) **Drive 2** as the source drive and click **OK** to continue.

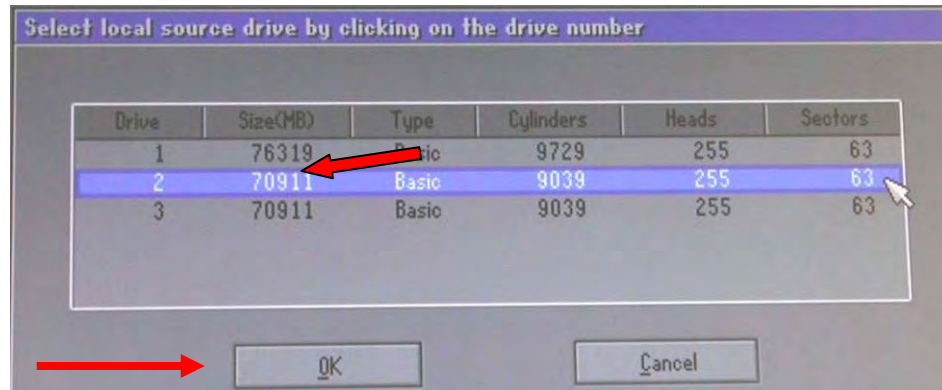


Figure 1-180. Source Drive

The "Select local destination drive" dialog is displayed (Figure 1-181).

13. Select (highlight) **Drive 3** as the destination drive and click **OK** to continue.

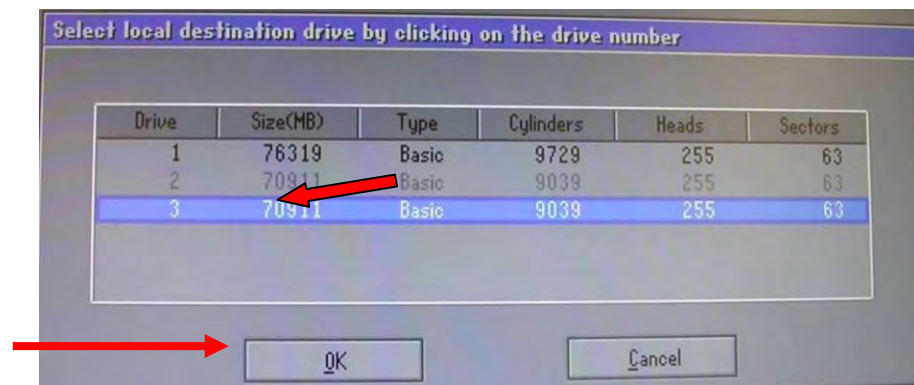


Figure 1-181. Destination Drive Selection

NOTE

Figure 1-182 is an example. The Drive Details may vary, depending on the destination hard drive.

14. The “Destination Drive Details” window is displayed (Figure 1-182). Click on **OK**.

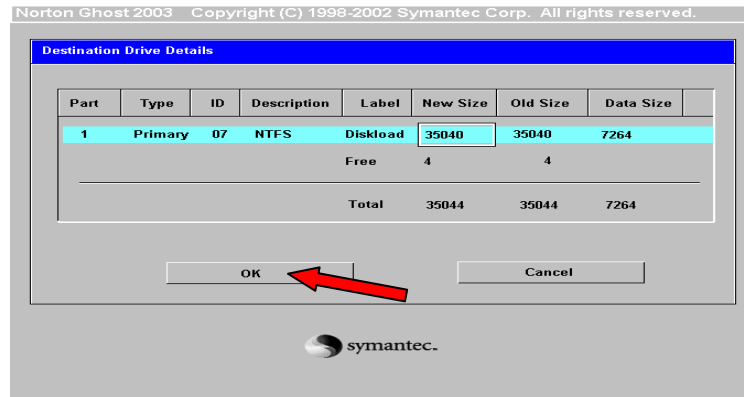


Figure 1-182. Destination Drive Details

15. The “Norton Ghost” window is displayed and a “Question” confirmation window is displayed (Figure 1-183). Click **Yes** to start the disk cloning process.

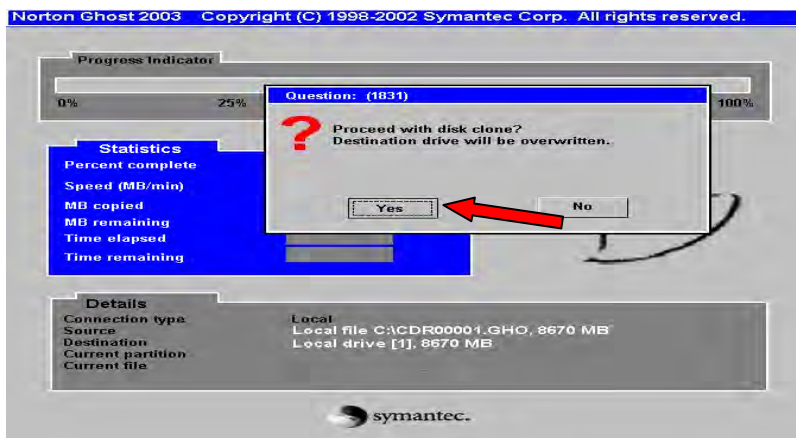


Figure 1-183. Proceed with Disk Clone

NOTE

The details displayed in Figure 1-184 are an example. Details may vary.

During the cloning process, a progress window is displayed (Figure 1-184).

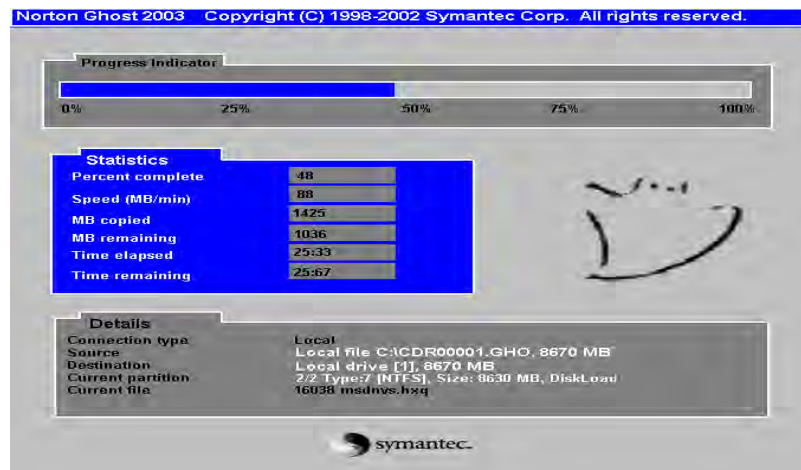


Figure 1-184. Clone Progress Indicator

16. When the cloning process is complete, a "Span Volume [1] Done" confirmation window displays the message, "Clone Completed Successfully" (Figure 1-185). Click **Continue** to return to the Ghost Menu.

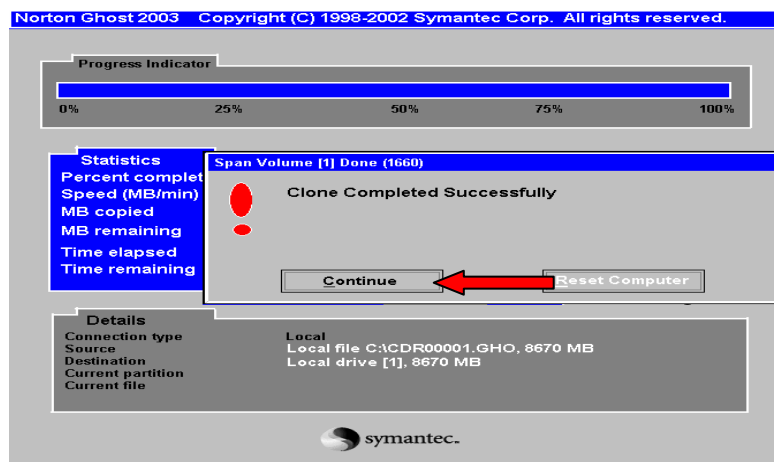


Figure 1-185. Clone Completed

The Ghost Menu is displayed (Figure 1-186).

17. If cloning more than one disk at a time, complete steps 11 through 16 until you have cloned the last inserted disk. After cloning the last inserted disk, continue with the next step.

18. Select **Quit** on the Ghost menu bar to exit Ghost.



Figure 1-186. Quit Ghost

A “Quit Norton Ghost” confirmation window displays the message, “Are you sure you want to quit?” (Figure 1-187).

19. Click **Yes** and remove “Ghost Boot Disk 2 of 2” from the Floppy disk drive.

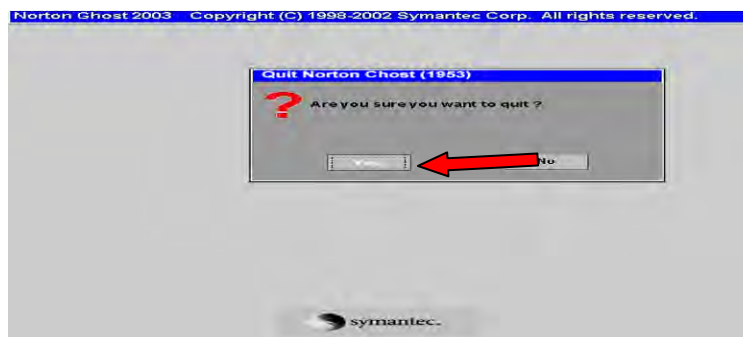


Figure 1-187. Confirm Quitting Norton Ghost

20. Press the power button on the front of the drive duplicator to turn the power off.

21. Remove the destination hard drive from the drive duplicator. Return removed disks to their respective computer and switch power on.

22. Repeat steps 3 through 21 for all remaining IMS hard drives.

10.5.2. Verification of Cloning and Configuration

1. Leave the source drive in the drive duplicator.
2. Go to the system containing the first cloned disk. Switch the monitor and keyboard if necessary.
3. Perform the steps in this section for each RIC, AFR-I (except AFR-I 01), AFR-II, and SUI.
4. Verify the computer is up and running.
5. If the message, "Operating System missing" is displayed on the first line:
 - a. Switch power off. Remove disk and insert disk again.
 - b. If the system comes up again with "Operating System missing", go to drive duplicator and clone the disk again.
 - c. If this happens twice, with the same disk, call the MTSC for spare part.
6. If the "Cool" logon screen is visible, this disk is not cloned yet. Switch power off, remove disk, and clone disk again at the drive duplicator.
7. If the first line displays something like, "ntoskernel.exe damaged", reboot the computer.
8. If the message is displayed again, switch power off, remove disk, and clone disk again at drive duplicator.
9. If the command line window is visible, indicating that there is an Error (Script not found), this error can be ignored. The configuration script is still running in the background and will reboot the computer.
10. Wait until the computer reboots and Windows logon screen is displayed. Ignore the pop up window with "System Settings change" and do not reboot system.
11. If the computer is a RIC, adapt virtual memory size.
 - a. At Windows logon screen, log on as **usps admin**.
 - b. Right click on the **My Computer** icon on the desktop. The context menu is displayed.
 - c. Click on **Properties**. The "System Properties" popup is displayed.

- d. Select the **Advanced** tab (Figure 1-188).

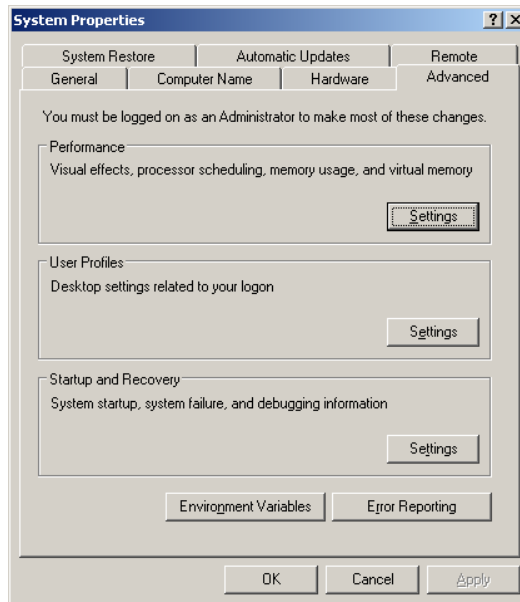


Figure 1-188. System Properties – Advanced tab

- e. In the Performance section, click on **Settings**. The "Performance Options" window is displayed (Figure 1-189). Select the **Advanced** tab.

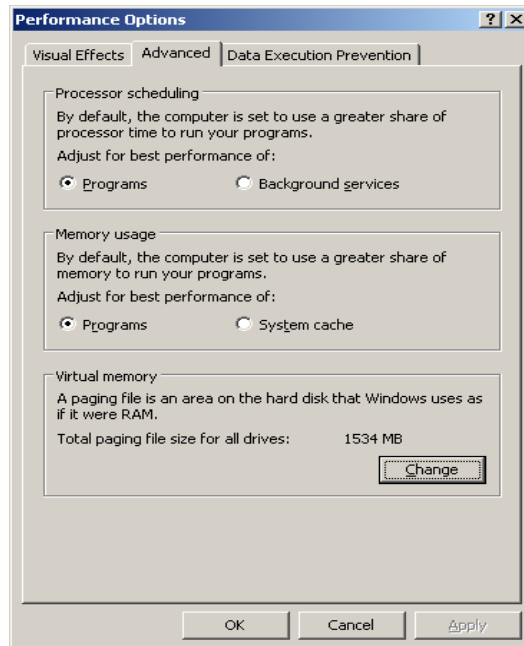


Figure 1-189. Performance Options Window

- f. Click on **Change** in the Virtual memory section. The "Virtual Memory" popup is displayed (Figure 1-190).
- g. In the "Initial size (MB):" field, change the existing value to **512**.
- h. In the "Maximum size (MB):" field, change the existing value to **512**.
- i. Click on **Set**. At the top of the dialog, the value for the "C:" drive "Paging File Size (MB)" changes to "512-512".
- j. Close the dialog by clicking on **OK**.

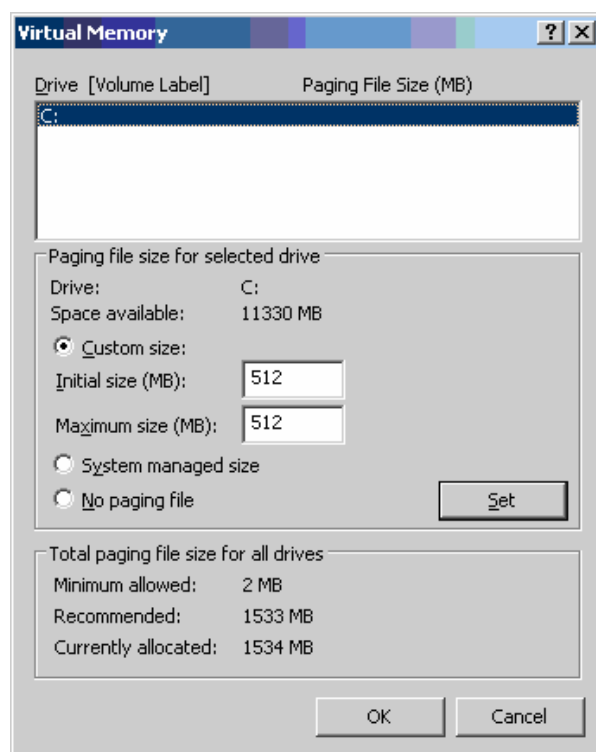


Figure 1-190. Virtual Memory Settings Dialog

- k. A "System Control Panel Applet" reminder pops up (Figure 1-191). Click on **OK** to continue.



Figure 1-191. System Control Panel Applet

- l. Close the "Performance Options" window by clicking on its **OK** button.
- m. Close the "System Properties" window by clicking on its **OK** button.

- n. The "System Settings Change" popup is displayed (Figure 1-192). Click on **Yes** to continue.

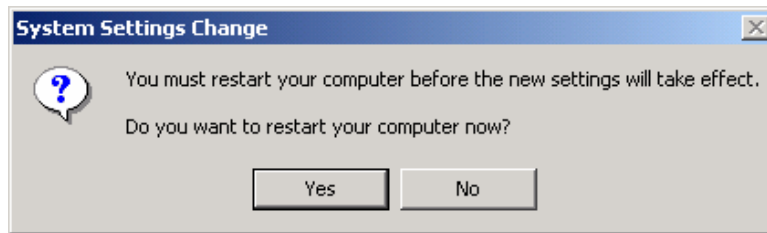


Figure 1-192. Reboot computer dialog

12. Repeat until all computers are running and show the windows logon screen.
 13. Go to the RIC-01 and log on as **usps admin** and shutdown.
 14. Remove disk.
 15. Return to drive duplicator.
- RIC and AFR OS installation is complete.

10.6. RIC-01 PREPARATION II

1. Shutdown the drive duplicator.
2. Remove the AFR-01 drive from the drive duplicator (if still there) and return it to the origin AFR-I 01 computer.
3. Verify according to section 10.5.2, Verification of Cloning and Configuration.
4. Only for Phase I Drive Duplicator:
 - a. Insert and lock the drive with the drive duplicator's Operating System in IDE Drive Bay 2 (the lower one) to make sure that this disk is drive C: with the subsequent boot.
 - b. Power on and boot the drive duplicator.
 - c. In Windows logon screen, click on the **Turn off Computer** button.
 - d. A window pops up. Click on **Turn off** to shutdown the computer.
5. Insert and lock the RIC-01 drive on drive duplicator.
 - a. On Phase I drive duplicator: in the topmost SCSI Bay (3rd from top)
 - b. On Phase II drive duplicator: the topmost Bay
6. Power on and boot the drive duplicator.
7. Log on as **usps admin**.
8. Open Windows Explorer.
9. From the drive duplicator, copy the entire folder C:\IMS_Setup to the RIC-01 drive.
 - a. In the left Explorer pane, click on Local Drive (C:)
 - b. Right click on folder **IMS_Setup**.
 - c. In the popup list, click on **Copy**.
 - d. In the left Explorer pane, right click on Local Drive (E:)
 - e. In the popup list, click on **Paste**.
 - f. If not selected, select the folder **IMS_Setup** in the left part of the explorer.

- g. Double click on the file, **filecheckmd5.exe**, located in the right pane of the explorer (Figure 1-193).

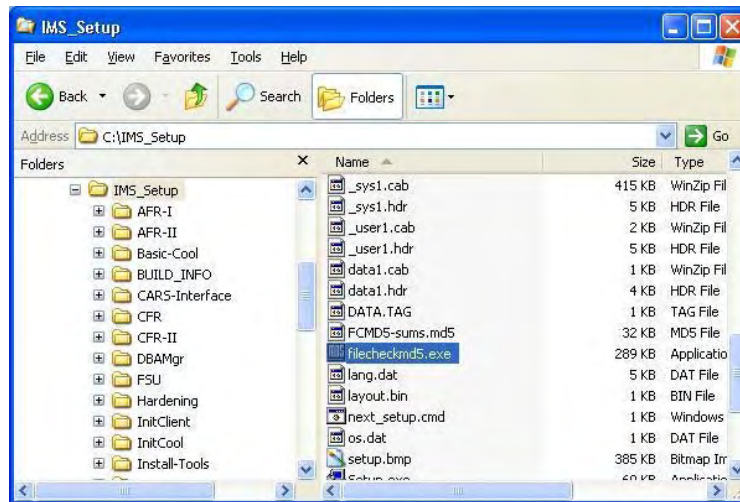


Figure 1-193. Select md5 File Check

- h. A "FileCheckMD5" window is displayed (Figure 1-194):
- i. If file check fails, repeat step 9. If it fails a second time, refer to section 10.2.5.1, steps 3 through 14 and insert the CD from the additional set of software that was mailed. If all three copies fail, refer to section 12.4.
- j. If file check is successful, click X to close window.

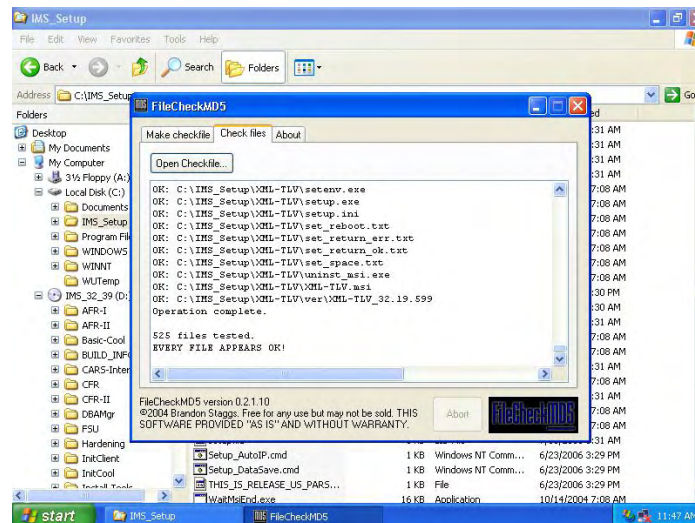


Figure 1-194. md5 File Check Executed

10. From the drive duplicator, copy the entire folder C:\IMS_Dict\cfg_srv to the RIC-01 drive:
- In the left Explorer pane, click on Local Drive (C:)
 - Click on folder **IMS_Dict**.
 - Right-click on folder **cfg_srv**.
 - In the popup list, click on **Copy**.

- e. In the left Explorer pane, right click on Local Drive (**E:**).
 - f. In the popup list, click on **Paste**.
11. From the drive duplicator, copy the file C:\IMS3_Backup\cfg_srv\siteconfig.ini to the RIC-01 drive, folder E:\cfg_srv:
- a. In the left Explorer pane, click on Local Drive (**C:**)
 - b. Click on folder **IMS3_Backup**.
 - c. Click on folder **cfg_srv**.

NOTE

If Backup has failed and no siteconfig.ini is in the backup folder, take the backup copy of this file from the floppy created in 10.4.3, Backup of IMS 3.0 siteconfig.ini file on page 99.

- d. In the right Explorer pane, right click on file **siteconfig.ini**.
 - e. In the popup list, click on **Copy**.
 - f. In the left Explorer pane, click on Local Drive (**E:**).
 - g. Right click on folder **cfg_srv**.
 - h. In the popup list, click on **Paste**.
12. Shutdown the drive duplicator.
13. Remove the RIC-01 drive.
14. Boot the drive duplicator.
15. Return RIC-01 drive to origin computer.

10.7. INSTALLATION OF IMS 4.0.1

1. Verify all IMS computers are powered-on (RICs, AFRs, SUIs).
The AutoIP-Scripts will start automatically and perform network configuration on each computer. After 10 minutes, the computers will reboot and the network configuration is finished.
2. Log on to RIC-01 as **usps admin**, if not already logged on.

10.7.1. Start IMS 4.0.1 installation

1. Open Windows Explorer.
2. Open the **C:\IMS_Setup** folder (Figure 1-195).

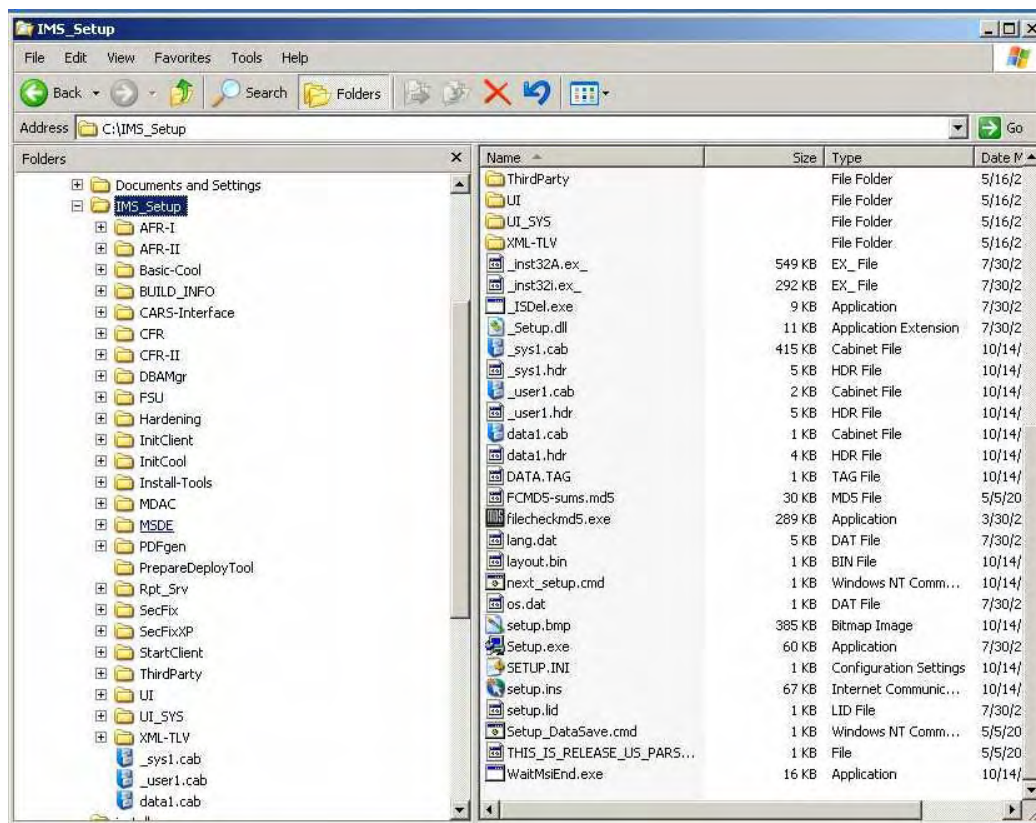


Figure 1-195. Filecheckmd5 Icon Selected

3. Locate the file **Setup.exe** in the C:\IMS_Setup folder and double click on it to start setup (Figure 1-196).



Figure 1-196. Setup Icon

Three "Select Components" dialogs are subsequently displayed (Figure 1-197).

4. Verify all checkboxes are checked on each menu and click **Next** to proceed to the next dialog window.

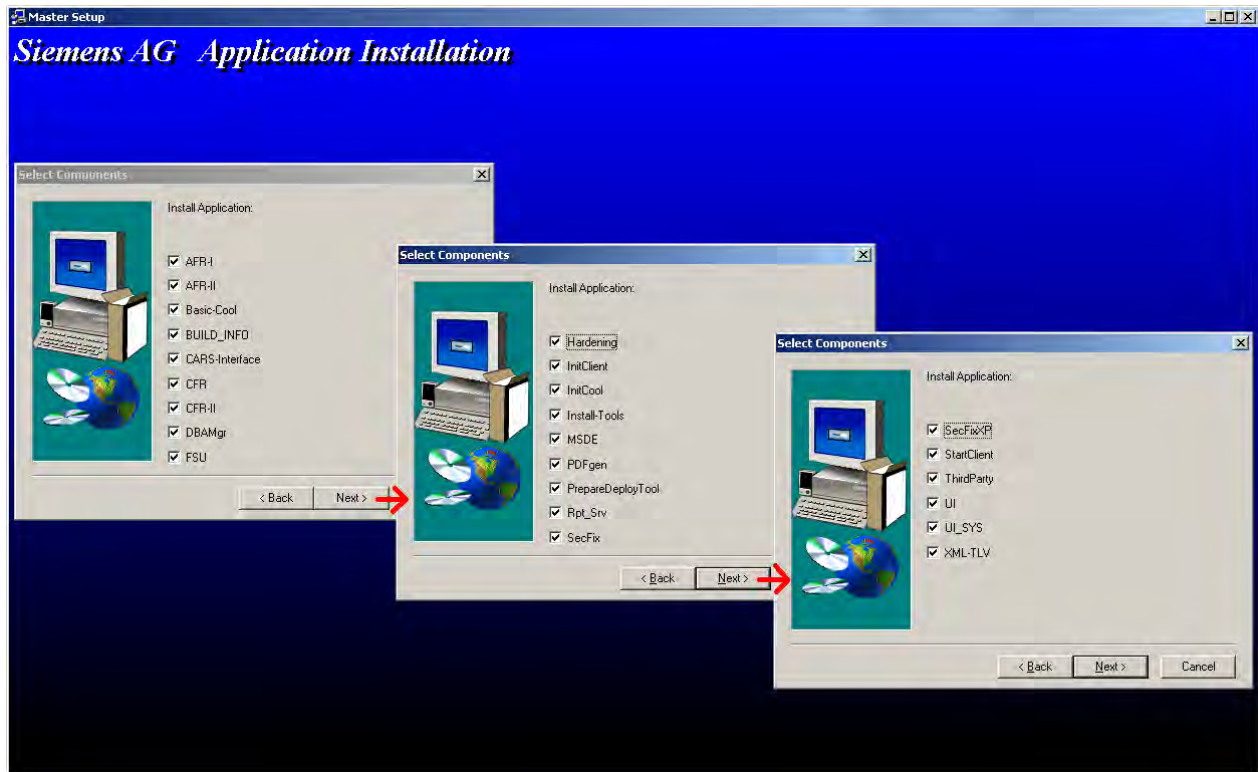


Figure 1-197. Setup Select Components Menu 1 - 3

NOTE

If during setup, a CMD window is displayed, reporting a problem that the Install Control Service cannot be installed or started, confirm by entering **return**. Refer to section 10.15.1.3, "Setting Up the Install Control Service" on page 172. If the service is not present, proceed to section 10.15.1.3, "Installing the Install Control Service" on page 173.

After clicking Next on the third "Select Components" dialog box, the installation of all packages is automatically started. The Setup will call the individual setups for each component. This will take approximately 20 minutes. When all packages are installed, the installation application will be automatically closed.

5. If during package installation, an alert window is displayed. Confirm by clicking **OK** (Figure 1-198).



Figure 1-198. Confirmation of Installer alert

6. Close the Explorer window.

10.7.2. Adapt the Initial Dictionary Files on the First RIC

Remove the write protection on all files in the "c:\cfg_srv" folder:

1. Open a command window from the desktop by selecting **Start** and **Run**. In the Open window, type **cmd** and press **OK**. A Command Window is displayed (Figure 1-199).
2. Enter **cd(space)** and press the **Enter** key.
3. Enter **attrib(space)-R(space)\cfg_srv*.*(space)/D(space)/S** and press the **Enter** key.
4. When the prompt **C:\>** is displayed again, type **exit** and press the **Enter** key to close the window.

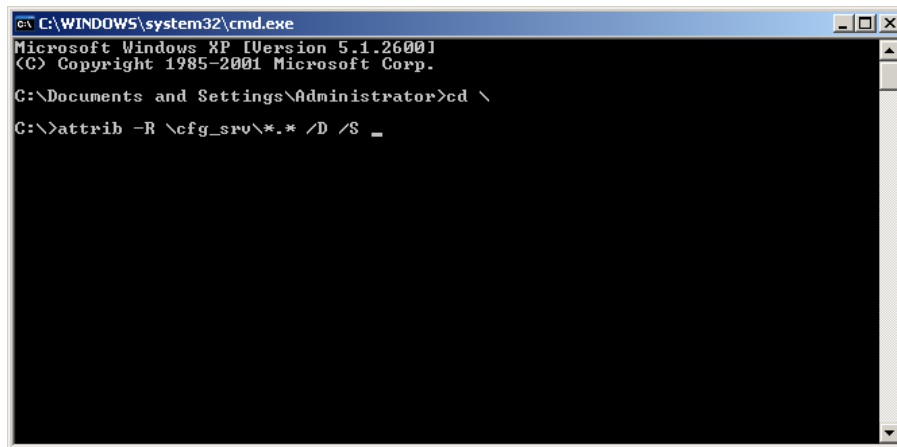


Figure 1-199. Change Attributes in a DOS Window

10.7.3. Adapting the IMS 3 Site Configuration for IMS 4.0.1

This routine is required with IMS 4.0.1 installation for two reasons:

- Some components have been split to support unbundling of subsystems.
- Subsystems IC, FSU, and CDB have been unbundled.

10.7.3.1 Adaptation of the site configuration with the Deployment Editor

1. From the desktop, start the Editor by double-clicking on the icon **Deployment Editor** (Figure 1-200).



Figure 1-200. Deployment Editor

If the site configuration file "C:\cfg_srv\siteconfig.ini" is missing, an "Error" prompt is displayed.

2. Perform the following sub-steps to clear the error:
 - a. Click **OK** to close the error popup.
 - b. Exit the Editor by selecting **File** and **Exit**.

NOTE

Refer to section 10.6, RIC-01 Preparation II on page 123 to find out how to get the saved siteconfig.ini (from IMS 3) to the RIC 01 hard disk.

- c. Re-start the Deployment Editor.
3. Identify the number of RICs available in the P&DC site:
 - a. Notation
 - n** This means the field can contain any number. If the field is empty, click the up arrow icon one time and number will be displayed.
 - 1,2,3...** click the up/down arrow until just the number is displayed. Bolded number needs to be entered in to the field exactly as shown.
 - Blank** Blank fields must remain blank.
 - b. Procedure
 - 1) Highlight the hostname of a computer in the left Editor pane.
 - 2) Setup the components index, according to the table in the right Edit or pane.

10.7.3.2 P&DC Site with 2 RIC Servers

2-RIC site, RIC #1 (hostname usually *MRIC0, 13 components configured)

Modify RIC, CDB_QF, CDB_OP, CDB_ST, DB_MSDE

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC	n	Hardening	n
RIC	1	SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU	1	CDB_QF	1
VDT		CDB_OP	1
AFR-I		CDB_ST	1
AFR-II		DB_MSDE	1

2-RIC site, RIC #2 (hostname usually *MRIC1, 12 components configured)

Modify CDB_QF, CDB_OP, CDB_ST, DB_MSDE

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC	2	SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	2
FSU	2	CDB_QF	2
VDT		CDB_OP	2
AFR-I		CDB_ST	2
AFR-II		DB_MSDE	2

2-RIC site, Each AFR-I computer (hostname usually *MAFxx, 8 components configured)

Modify CARS-Client, XMLTLV

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC		SecFixes	n
IH		CARS-Client	n
UI		XMLTLV	n
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I	n	CDB_ST	
AFR-II		DB_MSDE	

2-RIC site, Each AFR-II computer (hostname usually *MAFxx, 9 components configured)

Modify CARS-Client, XMLTLV

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC		SecFixes	n
IH	n	CARS-Client	n
UI		XMLTLV	n
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I		CDB_ST	
AFR-II	n	DB_MSDE	

10.7.3.3 P&DC site with 3 RIC servers

This configuration is no longer supported; contact the MTSC for solution.

10.7.3.4 P&DC site with 4 RIC servers

4-RIC site, RIC #1 (hostname usually *MRIC0, 12 components configured)

Modify RIC, CDB_QF, CDB_OP, CDB_ST, DB_MSDE

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC	1	Hardening	n
RIC		SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU	1	CDB_QF	1
VDT		CDB_OP	1
AFR-I		CDB_ST	1
AFR-II		DB_MSDE	1

4-RIC site, RIC #2 (hostname usually *MRIC1, 11 components configured)

Modify RIC, CDB_QF, CDB_OP, CDB_ST, DB_MSDE

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC		SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU	2	CDB_QF	2
VDT		CDB_OP	2
AFR-I		CDB_ST	2
AFR-II		DB_MSDE	2

4-RIC site, RIC #3 (hostname usually *MRIC2, 7 components configured)

Modify RIC, FSU

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC	3	SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I		CDB_ST	
AFR-II		DB_MSDE	

4-RIC site, RIC #4 (hostname usually *MRIC3, 7 components configured)

Modify RIC, FSU

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC	4	SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I		CDB_ST	
AFR-II		DB_MSDE	

SOFTWARE MODIFICATION ORDER

SOFTWARE MODIFICATION ORDER

4-RIC site, Each AFR-I computer (hostname usually *MAFxx, 8 components configured)

Modify CARS-Client, XMLTLV

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC		SecFixes	n
IH		CARS-Client	n
UI		XMLTLV	n
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I	n	CDB_ST	
AFR-II		DB_MSDE	

4-RIC site, Each AFR-II computer (hostname usually *MAFxx, 9 components configured)

Modify CARS-Client, XMLTLV

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC		SecFixes	n
IH	n	CARS-Client	n
UI		XMLTLV	n
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I		CDB_ST	
AFR-II	n	DB_MSDE	

SOFTWARE MODIFICATION ORDER

SOFTWARE MODIFICATION ORDER

10.7.3.5 P&DC site with 5 RIC servers

5-RIC site, RIC #1 (hostname usually *MRIC0, 12 components configured)

Modify RIC, CDB_QF, CDB_OP, CDB_ST, DB_MSDE

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC	1	Hardening	n
RIC		SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU	1	CDB_QF	1
VDT		CDB_OP	1
AFR-I		CDB_ST	1
AFR-II		DB_MSDE	1

5-RIC site, RIC #2 (hostname usually *MRIC1, 11 components configured)

Modify RIC, CDB_QF, CDB_OP, CDB_ST, DB_MSDE

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC		SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU	2	CDB_QF	2
VDT		CDB_OP	2
AFR-I		CDB_ST	2
AFR-II		DB_MSDE	2

5-RIC site, RIC #3 (hostname usually *MRIC2, 7 components configured)

Modify RIC, FSU

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC	3	SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I		CDB_ST	
AFR-II		DB_MSDE	

5-RIC site, RIC #4 (hostname usually *MRIC3, 7 components configured)

Modify RIC, FSU

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC	4	SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I		CDB_ST	
AFR-II		DB_MSDE	

SOFTWARE MODIFICATION ORDER

SOFTWARE MODIFICATION ORDER

5-RIC site, RIC #5 (hostname usually *MRIC4, 7 components configured)

Modify RIC, FSU

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC	5	SecFixes	n
IH		CARS-Client	
UI	n	XMLTLV	
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I		CDB_ST	
AFR-II		DB_MSDE	

5-RIC site, Each AFR-I computer (hostname usually *MAFxx, 8 components configured)

Modify CARS-Client, XMLTLV

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC		SecFixes	n
IH		CARS-Client	n
UI		XMLTLV	n
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I	n	CDB_ST	
AFR-II		DB_MSDE	

5-RIC site, Each AFR-II computer (hostname usually *MAFxx, 9 components configured)
 Modify CARS-Client, XMLTLV

InitClient	n	CFR	
InitCool	n	CFR-II	
Master-RIC		Hardening	n
RIC		SecFixes	n
IH	n	CARS-Client	n
UI		XMLTLV	n
XAIV		StartClient	n
FSU		CDB_QF	
VDT		CDB_OP	
AFR-I		CDB_ST	
AFR-II	n	DB_MSDE	

10.7.3.6 Save the modified Configuration

Save the site configuration by performing the following:

1. Select **File** and **Save** on the “Deployment Editor” menu bar.
2. Choose **File** and **Exit** to close the Editor. A “Save changes?” alert window is displayed.
3. Click on **Yes**.

10.8. DEPLOYMENT OF IMS 4.0.1

1. Before deployment of the software, check the configuration with the Deploy Editor. No error should be indicated. Close the editor and save the configuration.
2. Double click the **Installer User Interface** (Install UI) icon on the desktop. The initial window of Install UI opens up (Figure 1-201).



Figure 1-201. Installer User Interface Icon

10.8.1. Connection Test

With IMS 4.0.1, the connections in the IMS network and proper setup of the servers can be tested by using the “Connectivity Test” integrated in the Install UI.

NOTE

DO NOT use “PREPARE DEPLOY” Button, Use “CONNECTION TEST” instead.

The Connection Test can be run during operational mode of a site (Figure 1-202).

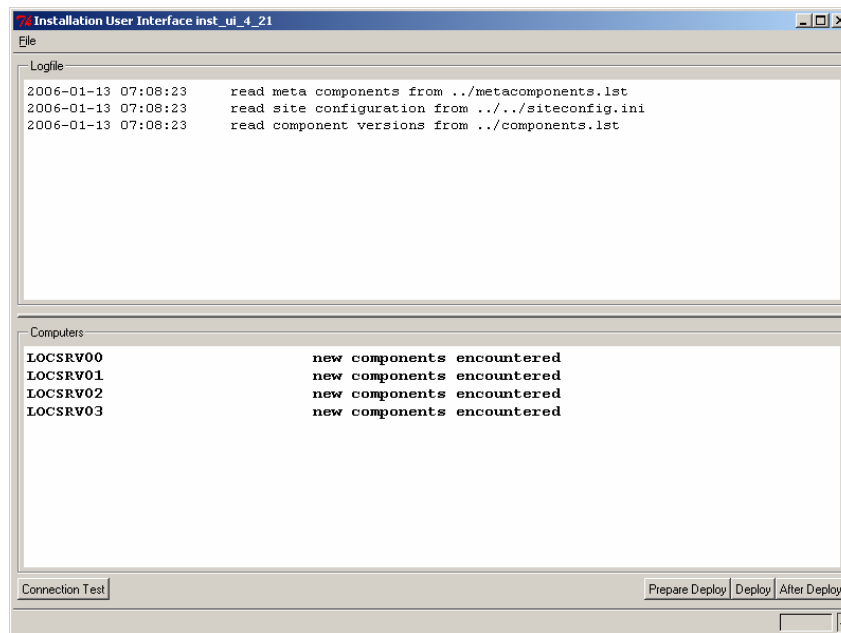


Figure 1-202. Install UI Connection Test

1. To start the test, click **Connection Test**. The Connection Test window is displayed (Figure 1-203).
2. Click **Start/Restart** to start the test.

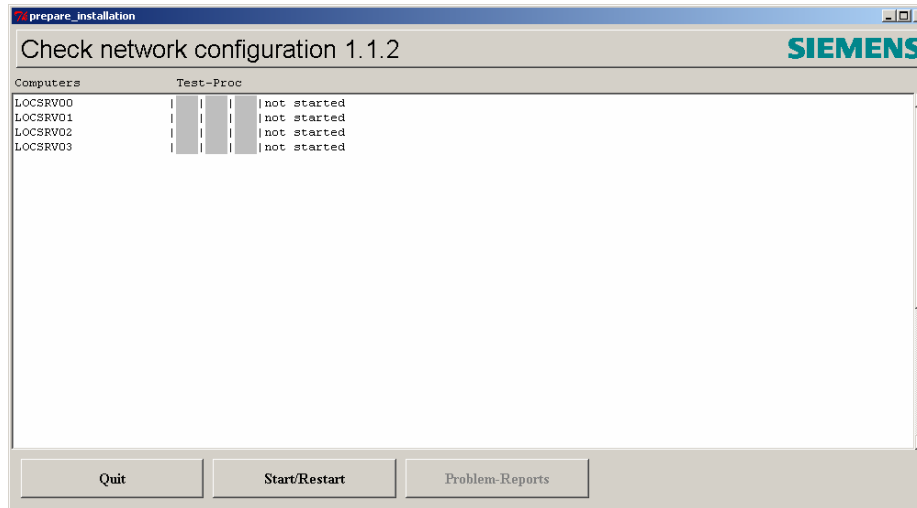


Figure 1-203. Connection Test Window

Three tests are performed (Figure 1-204):

- Ping for network connectivity
- Check if login as “usps admin” is possible
- Check if computer name is the same as defined in siteconfig.ini for that ip address

Status bar colors:

- Test succeeds: green
- Transition phase: yellow
- Test fails: red

3. If all tests are successful, close the Check network configuration window by clicking on **Quit**. Otherwise, continue with the next step.

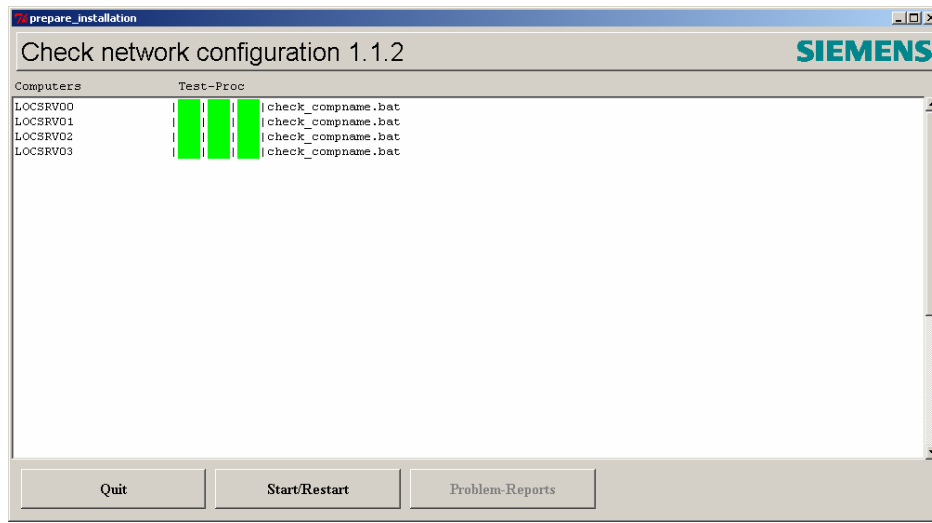


Figure 1-204. Successful Connection Test

4. In case of test failure, consult Problem-Reports to solve the problem (Figure 1-205):

In Figure 1-205, the ping to LOCSR01 failed. For LOCSR02, the login as 'usps admin' is running and has not finished yet. The tests start parallel, but due to network connectivity, they can finish to different times.

5. Click on **Problem-Reports**.

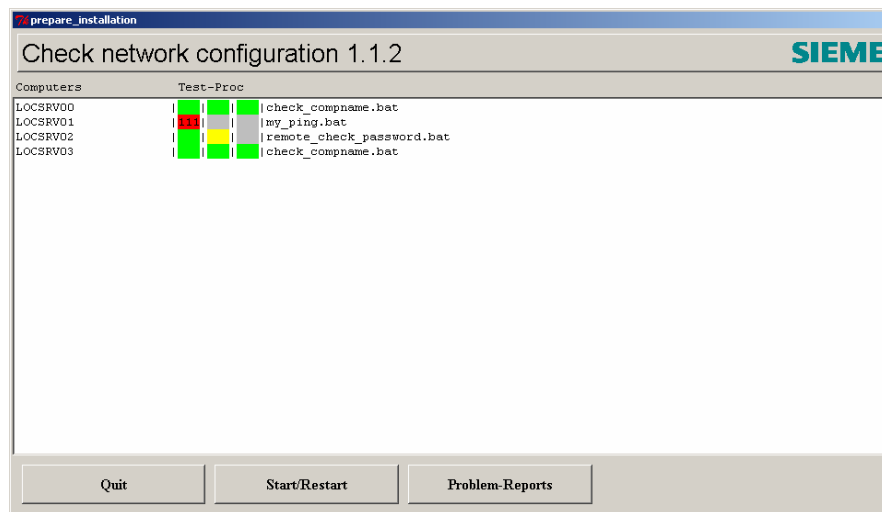


Figure 1-205. Connect Test Results

The Problem PC Selector window displays the problematic servers (Figure 1-206).

6. Highlight a server and a click on **show problem log**.

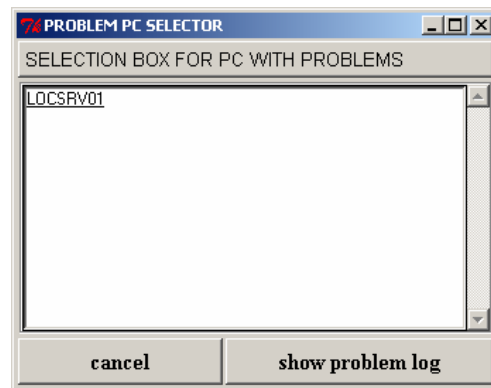


Figure 1-206. Server with Failed Connection Test

SOFTWARE MODIFICATION ORDER

SOFTWARE MODIFICATION ORDER

An Information window with a detailed report is displayed (Figure 1-207).

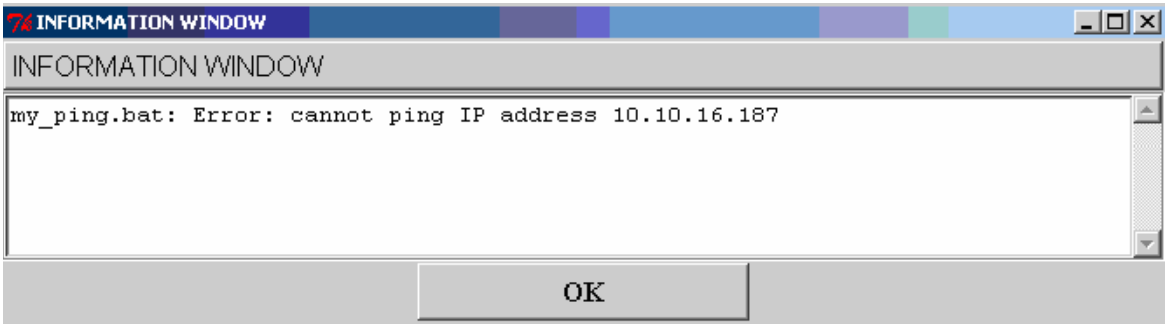


Figure 1-207. Problem Log for Connection Test

10.8.2. SW Deployment to the First RIC computer

- 1. Start the Installer by double-clicking on the **Install User Interface** desktop icon, if not already open.

The Install UI reads the site configuration (siteconfig.ini file) and some information about the components as shown in the Logfile area (Figure 1-208). All computers and their installation status are listed in the Computers area.

- 2. Click **Deploy** to start installation of the First RIC computer, e.g. LOCSRV00.

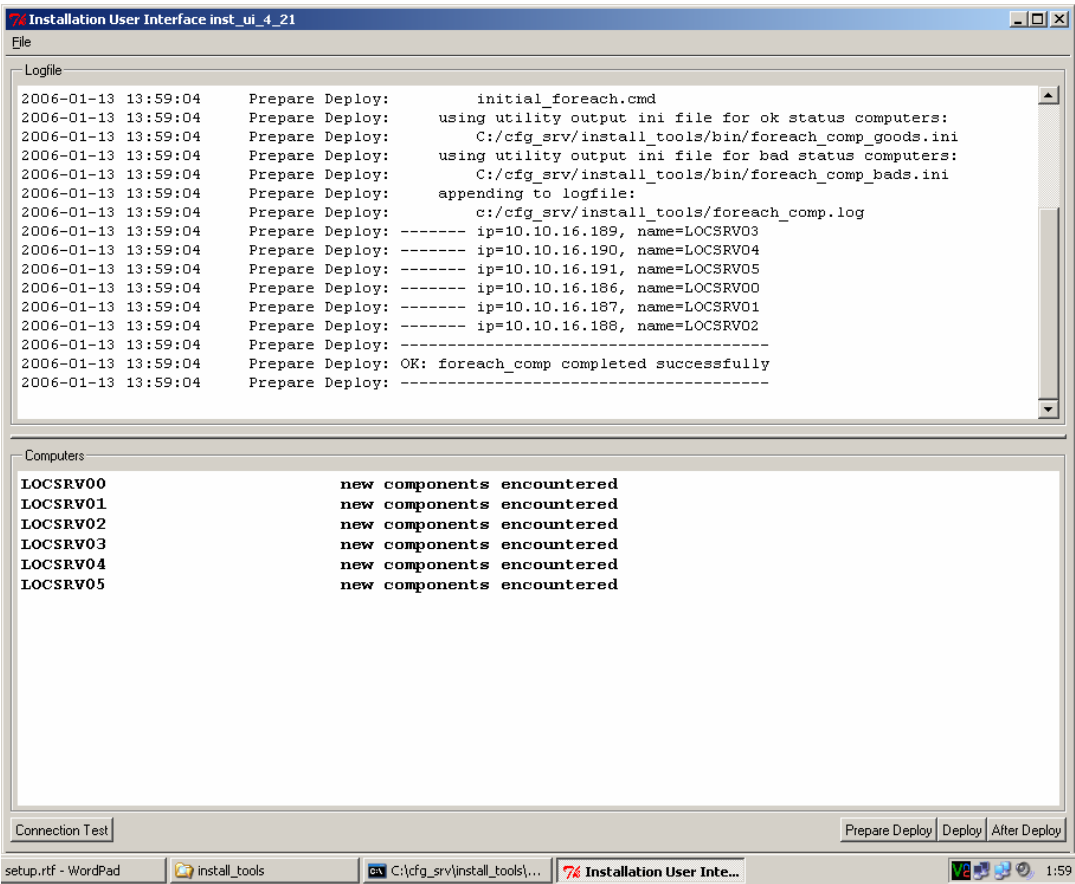


Figure 1-208. Install UI Initial Status

NOTE

Do not click 'Deploy' again until the First RIC computer reports "successfully installed".

The "Generator Finished Successfully" screen is displayed (Figure 1-209).

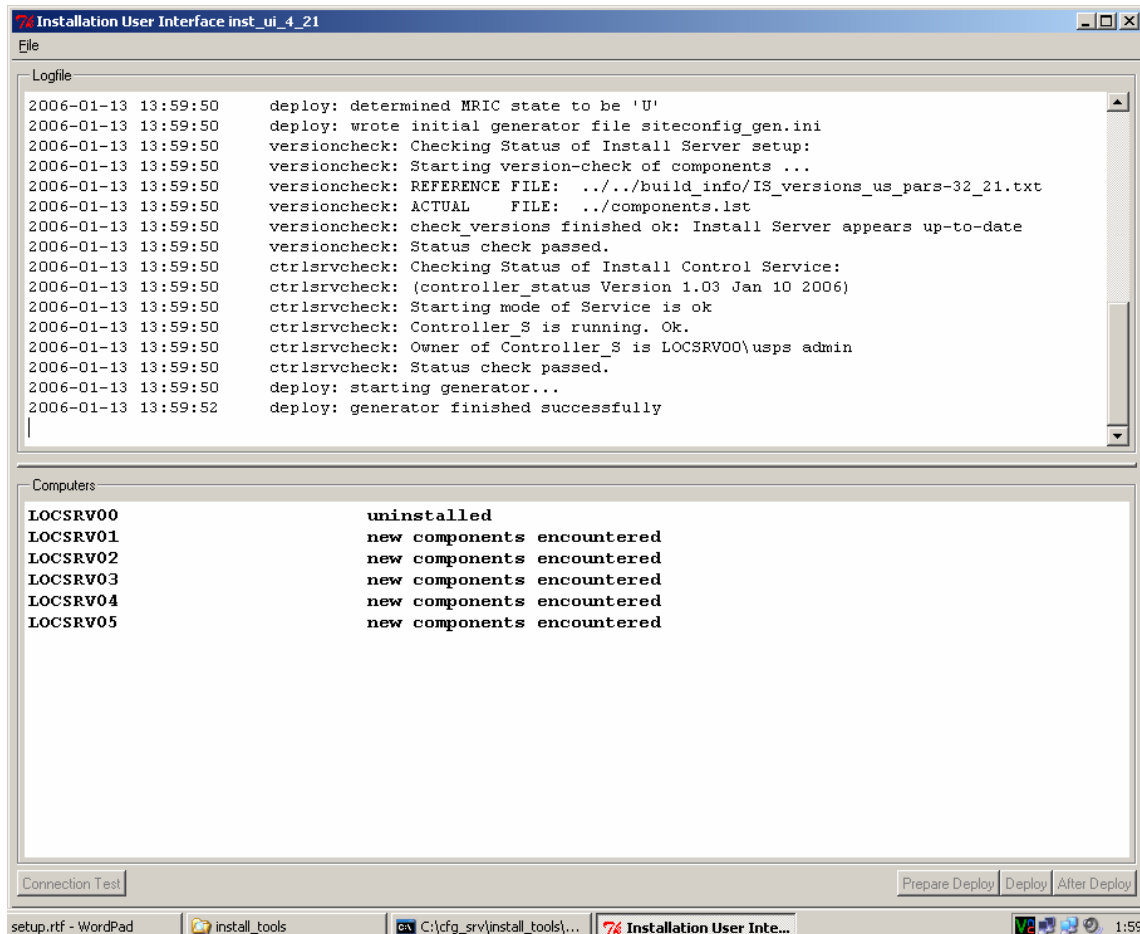


Figure 1-209. Install UI Showing Generator Finished Successfully

Deployment action:

The computer will reboot after several seconds. Several screens and Command windows will flicker during deployment. This is harmless and can be ignored.

After the First RIC computer has rebooted, the Install UI will restart automatically. The installation processing and status changes are displayed in the upper half of the window as the deployment proceeds. The summary of the status is displayed in the 'Computers' view. It will change from "uninstalled" to "partly installed" and/or "install in progress" as processing proceeds. Some status changes are shown in the screen shot in Figure 1-210. U -> P means that the specific component left the 'U'ninstall status and is now being installed, i.e. is in 'P'rocess. 'P' -> 'I' is issued when that specific component has finished. Refer to section 10.13, "Error codes and status information of the setup" to get the different status summary explained.

When everything works properly, the installation of the First RIC computer will finish after approximately 15 minutes and the lower window will display “successfully installed” as shown in Figure 1-210.

The following problems may occur:

- The computer goes into ‘Error’ status.

NOTE

The computer may continue installation despite the error. This depends on whether the error is issued by an individual component installation. In this case, the subsequent components get installed anyway. When there is no action for 30 minutes after an error occurred, you can expect that nothing more will happen automatically for the specific computer.

- The computer hangs in “yellow state” (install in process or partly installed).
The computer is hanging when there is no action for 30 minutes.

Proceed with section 10.15.1, “Trouble shooting” when there is actually a problem.

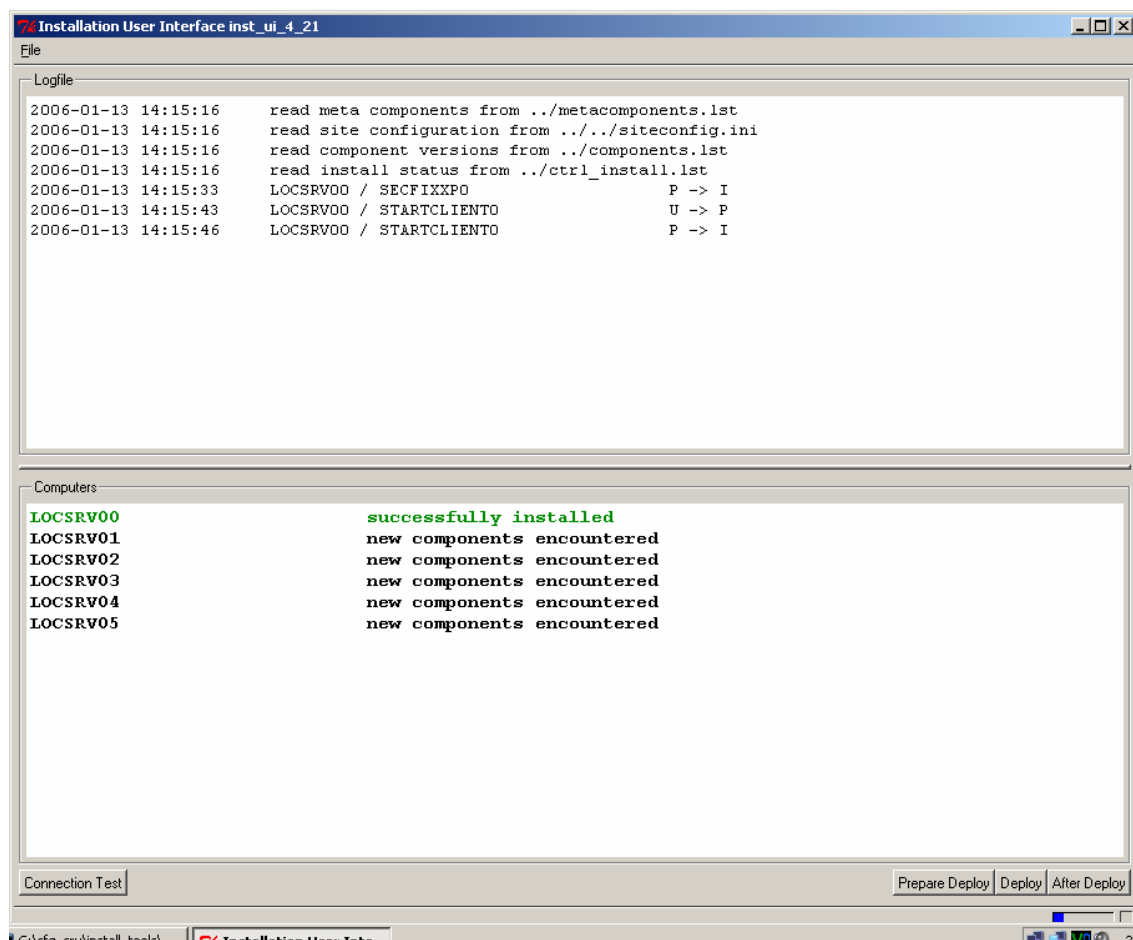


Figure 1-210. Install UI Showing First RIC Computer Successfully Installed

NOTE

Do not proceed with client installation unless the First RIC computer has been successfully installed!

10.8.3. SW Deployment to the Remaining Clients

1. In the Install UI, click **Deploy** to install the remaining clients.

NOTE

Do not click 'Deploy' again when deployment has actually started!
If you need another 'Deploy' (e.g. in order to reinstall a computer in Error), you must wait until the installation has finished.

The clients are going to be installed. Installation processing and status will again be displayed in the upper half of the window as the deployment proceeds. The clients will also be rebooted several times and status will change to "partly installed" as shown in Figure 1-211.

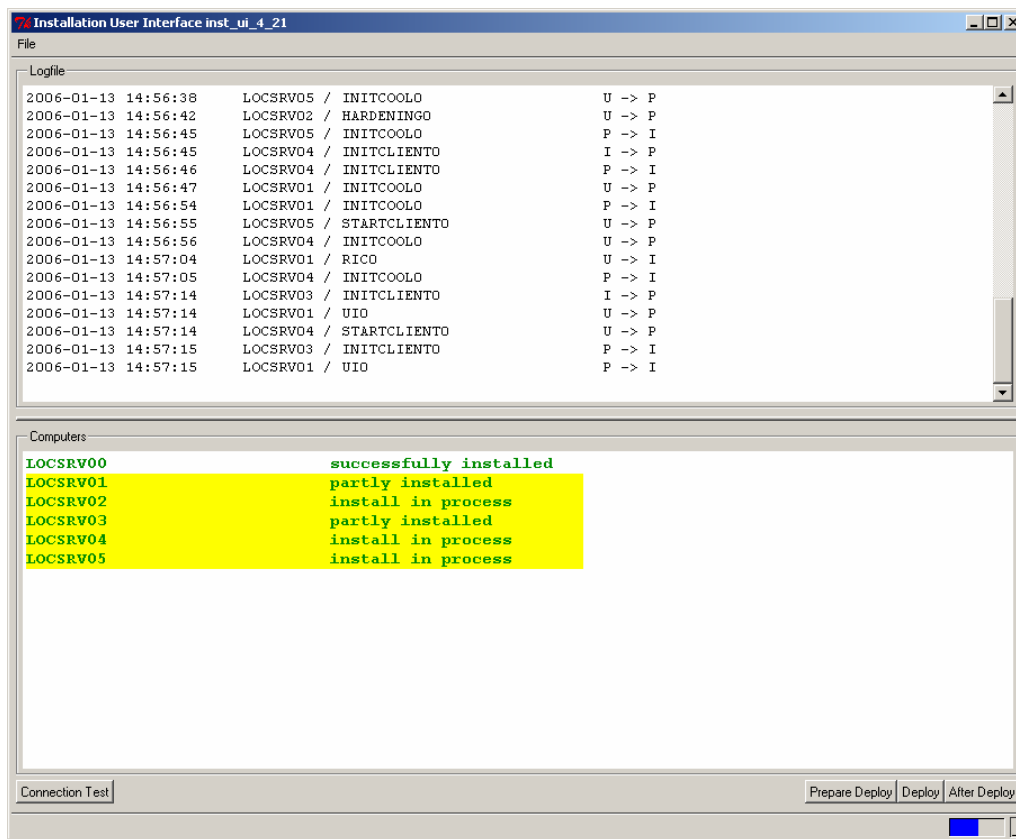


Figure 1-211. Install UI Showing Clients Being Installed

When everything works properly, installation of the clients will be finished after approximately 30-45 minutes and the lower window will display “successfully installed” as shown in Figure 1-212. The following problems may occur:

- One or more computers go into 'Error' status.

NOTE

A computer might continue installation despite the error. This depends on whether the error is issued by an individual component installation. In this case, the subsequent components get installed anyway. If no visible action within 50 minutes after an error occurred, then you can expect that nothing more will happen automatically to the specific computer.

- One or more computers hang in “yellow state” (install in process or partly installed). A computer is hanging when there is no action for 50 minutes. Check for status changes in the 'Computers' view and in the 'Logfile' view to detect this.

NOTE

For AFR computers, deployment also means download of dictionaries from the First RIC. This may take up to 40 minutes.

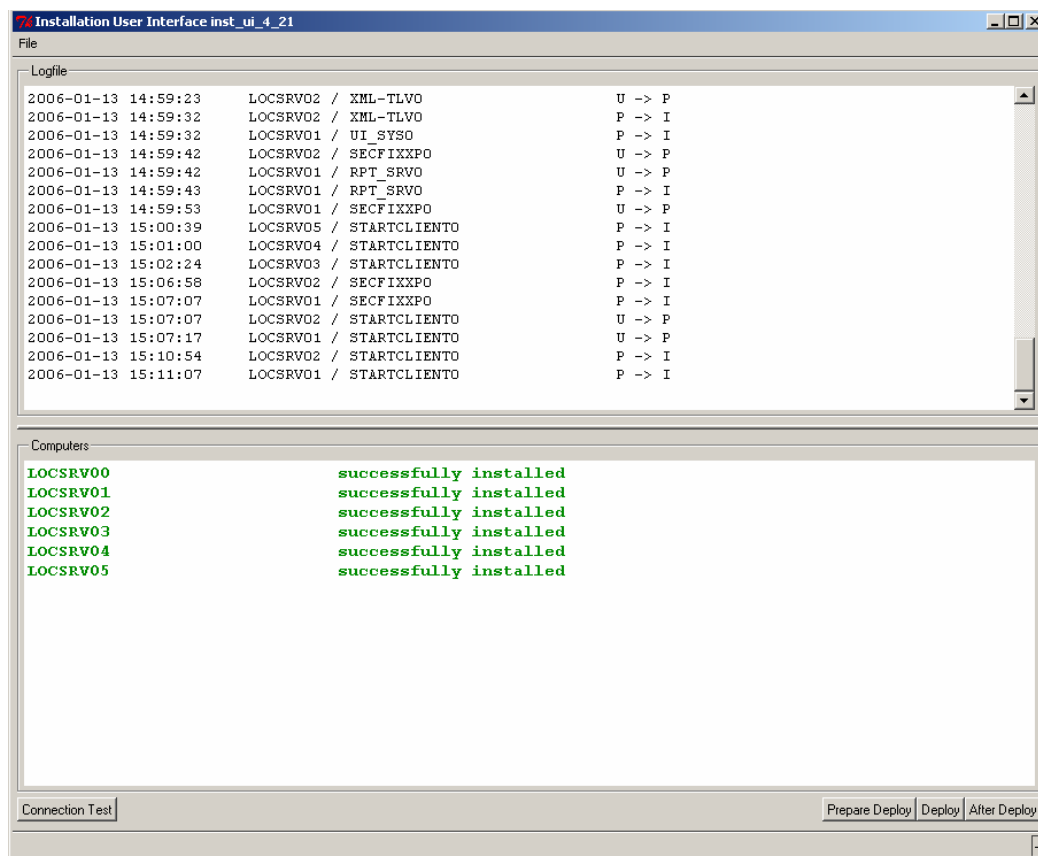


Figure 1-212. Install UI Showing All Computers Installed

Follow the instructions in the "Trouble Shootings" section when you actually encounter a problem.

NOTE

The IMS application on a client (except where the component RIC is configured) is automatically started after successful installation. Applications on the RICs have to be started specifically from the Supervisor UI on any computer.

2. Verify that all computers are in a state of successfully installed. Use the scroll bar of the lower window to make sure all computers are listed.
3. Click on the button **After Deploy** in Install UI to perform some finishing tasks. A window will be displayed and show the progress.
4. The last action is to reboot all clients. Like Connection Test and Prepare Deploy, the After Deploy function creates a report in case of a problem, which is accessible by clicking on the Problem Reports button.
5. Click **Start/Restart** to finish the installation and to reboot all clients (Figure 1-213). Wait until all computers are listed in green color.
6. Click **Quit**.

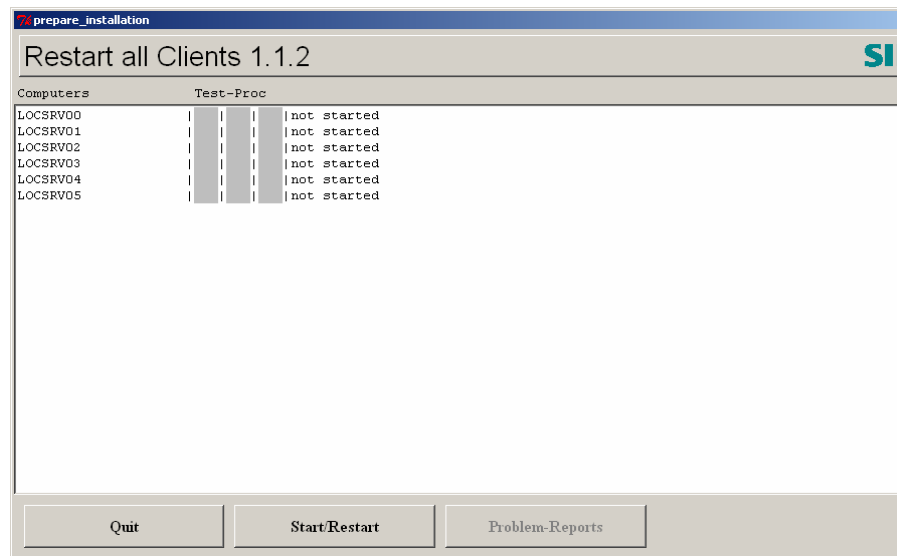


Figure 1-213. After Deploy Windows

In case any computer is still in state "connection wait" in the Install UI (which is acceptable), you have to disable the Install Control Service (see section 10.15.1.3, and the topic entitled, "[Disabling the Install Control Service](#)" on page 177.

7. Choose **File** and **Exit** to leave the Install UI. A confirmation window displays, "Are you sure you want to exit the installation view ?". Click **Yes** to confirm.

10.8.4. Print SiteConfig.Ini

1. Open Windows Explorer.
2. Select **c:\cfg_srv** in the left pane and locate the file **siteconfig.ini** in the right frame.
3. Right click on file and in the popup menu and select **Print**. Siteconfig.ini will be printed on system printer, typically located in the Supervisor UI cabinet.
4. An "OKILPR" window could display "write permissions is required for spool directory" (Figure 1-214). Click on **Yes**.

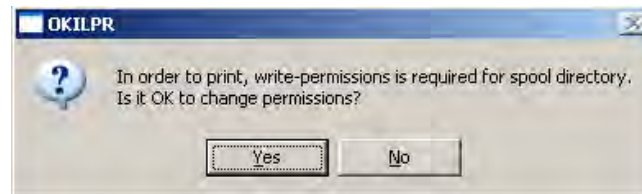


Figure 1-214. OKI Line Printer Directory Permissions

5. Retrieve the printout.
6. Connect the USB floppy drive USB cable to the USB port on the front of the First RIC.
7. Insert a formatted disk into the drive.
8. Open a "cmd.exe" Command window:
9. Type **cd**(space)**c:\cfg_srv** and press the **Enter** key. The prompt will change to "C:\cfg_srv".
10. Type **copy**(space)**siteconfig.ini**(space)**a:** and press the **Enter** key. The window should display "1 file(s) copied" above the prompt "C:\cfg_srv" (Figure 1-215).

```

C:\WINNT\system32\cmd.exe
C:\cfg_srv>cd install_tools
C:\cfg_srv\install_tools>copy siteconfig_dpl.ini a:
1 file(s) copied.
C:\cfg_srv\install_tools>copy ctrl_install.lst a:
1 file(s) copied.
C:\cfg_srv\install_tools>a:
A:\>dir
Volume in drive A has no label.
Volume Serial Number is 7889-E93E

Directory of A:\

06/15/2005  05:16p                1,501 siteconfig.ini
06/28/2005  09:33a                1,624 siteconfig_dpl.ini
06/28/2005  09:44a                 351 ctrl_install.lst
               3 File(s)              3,476 bytes
               0 Dir(s)             1,453,568 bytes free

A:\>
  
```

Figure 1-215. Listing of Files on Floppy Drive

11. At the Command window prompt, type **cd**(space)**install_tools** and press the **Enter** key. The prompt will change to "C:\cfg_srv\install_tools>".
12. Type **copy**(space)**siteconfig_dpl.ini**(space)**a:** and press the **Enter** key. The window should display "1 file(s) copied" above the prompt "C:\cfg_srv\install_tools>".
13. Type **copy**(space)**ctrl_install.lst**(space)**a:** and press the **Enter** key. The window should display "1 file(s) copied" above the prompt "C:\cfg_srv\install_tools>".

14. Verify the files were copied by typing **a:** and press the **Enter** key. The prompt should change to "A:\>".
15. Type **dir** and press the **Enter** key. The window should display the files siteconfig.ini, siteconfig_dpl.ini, and ctrl_install.lst above the "A:\>" prompt.
16. Close the Command window by typing **Exit** and pressing the **Enter** key.
17. Remove the diskette from the drive and unplug the drive's USB cable.

NOTE

If an "Unsafe Removal of Device" popup window is displayed, click on **OK** to close window.

18. Label the backup diskette "IMS 4 siteconfig and install status files" and store it in a safe place to have it available.
19. Log off and hold down the left **Shift** key to prevent automatic logon of user 'cool'.
20. Log on as **usps admin**.

10.9. PERFORM A FIX INTO THE VCC_IDS.CFG FILE

NOTE

Every time a system is deployed or the 'Deploy' button in Install UI is pressed, edit the file VCC_IDS.CFG again.

Due to a known issue with the VCC_IDS.CFG file, a manual fix is required for the 4 RIC and 5 RIC configuration. Follow the instructions below:

1. Move to RIC 1 if not already there.
2. Open a command window.
3. Type **notepad**(space)**c:\cfg_srv\cmn\lcfg\vcc_ids.cfg** and press the **Enter** key.
4. Adapt the configuration as follows:
 - In a site with a 4 RIC configuration

VCC	1	"10.10.16.186"
VCC	2	"10.10.16.187"
VCC	3	"10.10.16.188"
VCC	4	"10.10.16.189"
 - In a site with a 5 RIC configuration

VCC	1	"10.10.16.186"
VCC	2	"10.10.16.187"
VCC	3	"10.10.16.188"
VCC	4	"10.10.16.189"
VCC	5	"10.10.16.190"
5. Save the configuration by clicking on **CTRL-S** within the notepad.
6. Close the notepad.
7. Exit the Command window.

8. Log off. When logging off, continue to hold down the left **Shift** key until the log in screen is displayed to prevent automatic logon of user 'cool'.
9. The Windows Security window is displayed. Log on as user **usps admin**.

10.10. RESTORING DATA SAVED FROM IMS 3 TO IMS 4.0.1

This section covers the data restore of the previously saved IMS 3 data.

1. Open a command window from the desktop by selecting **Start** and **Run**. In the Open window, type **cmd** and press **OK**.
2. In the Command window, type **cd(space)\cfg_srv\install_tools\bin** and press the **Enter** key. The Command window prompt will change to "c:\cfg_srv\install_tools\bin>".
3. Type **restore_clients(space)\\10.10.16.1\c\$\IMS3_Backup** and press the **Enter** key to start the backup in normal mode.

NOTE

The command line window may be hidden by the restore status windows (Figure 1-216). If you see the DOS prompt in the status window, activate the command line window with a click on the appropriate icon in the task bar.

It may be necessary to scroll down the progress windows to see DOS prompt.

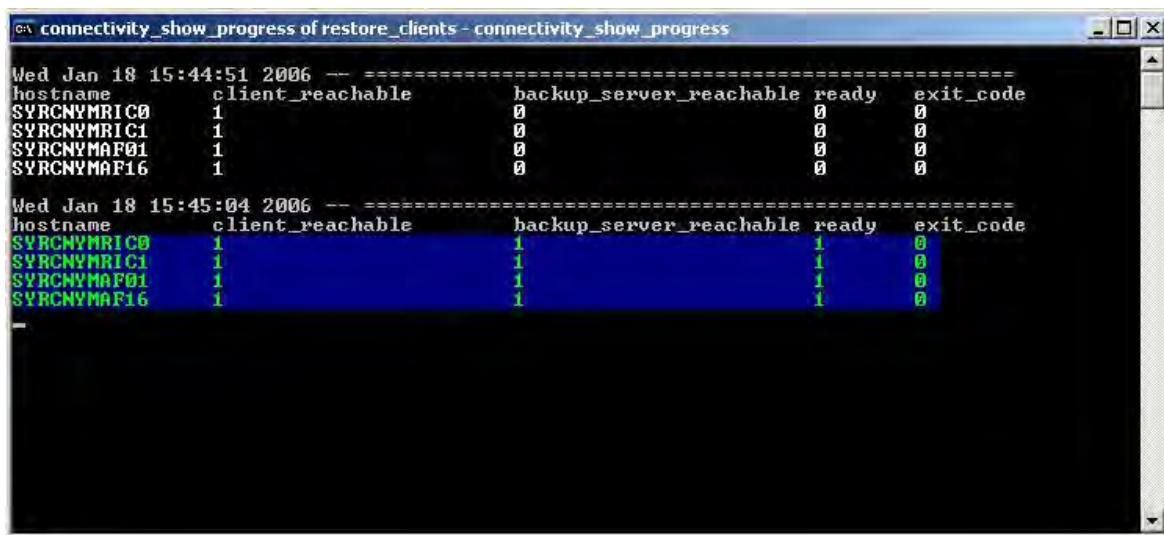


Figure 1-216. Restore Connectivity Progress

Restore starts and loops through siteconfig.ini, trying to connect to each computer (Figure 1-217).

If problems have been detected during connectivity test, the user will be prompted to continue the procedure or not. The procedure can be continued if the computer will not be used further, or if this computer will later be restored by starting the restore procedure again in single client mode.

Normal mode: All clients are restored.

Single client mode: Only the denoted client will be restored if restore of computer in normal mode fails.

The procedure will then stop the cool application on all clients. If one client cannot be stopped, the user will be prompted if the procedure should be continued or not. The procedure can be continued if the cool application on the according client has been manually stopped before.

The difference of colors is described in Table 1-4, Meaning of Colors in the Status Display of Connectivity Progress on page 95.

```

Wed Jan 18 15:56:09 2006 -- =====
hostname      trylink links  xcopies copy_gz detach  unlink unzip  touch  attach  ready  exit_cod
SVRCNVMRIC0   0      1      0      18      1      1      3      0      1      1      0
SVRCNVMRIC1   0      1      0      18      1      1      3      0      1      1      0
SVRCNVMRF01   1      0      0      0      0      0      0      0      0      0      0
SVRCNVMRF16   0      1      0      4      0      1      4      0      0      1      0

Wed Jan 18 15:56:20 2006 -- =====
hostname      trylink links  xcopies copy_gz detach  unlink unzip  touch  attach  ready  exit_cod
SVRCNVMRIC0   0      1      0      18      1      1      3      0      1      1      0
SVRCNVMRIC1   0      1      0      18      1      1      3      0      1      1      0
SVRCNVMRF01   1      0      0      0      0      0      0      0      0      0      0
SVRCNVMRF16   0      1      0      4      0      1      4      0      0      1      0

Wed Jan 18 15:56:31 2006 -- =====
hostname      trylink links  xcopies copy_gz detach  unlink unzip  touch  attach  ready  exit_cod
SVRCNVMRIC0   0      1      0      18      1      1      3      0      1      1      0
SVRCNVMRIC1   0      1      0      18      1      1      3      0      1      1      0
SVRCNVMRF01   1      0      0      0      0      0      0      0      0      0      0
SVRCNVMRF16   0      1      0      4      0      1      4      0      0      1      0

C:\cfg_srv\install_tools\bin>

```

Figure 1-217. Restore Progress

A new DOS window displays the status of the restore. The status chart is permanently updated. The meaning of the different colors is described in Table 1-6.

Table 1-6. Restore Progress Colors

Text /	Red	Green	white	bright white
Background				
Blue		The client has been completed 1) Successfully exit_code = 0 ready = 1 some counters>0 2) Client has been commented out in siteconfig.cfg "not used" appears		
white				
bright white	The client has been completed, but it was not successfully exit_code != 0			
black			Logfile-for client has been created but no separate action has been completed. (All counters in the line are 0)	At least one separate action has been completed. At least one counter is greater than 0 in the line.

4. To repeat the restore for a single client, type **restore_clients \\10.10.16.1\c\$\IMS3_Backup** <hostname of client> at the DOS prompt and press the **Enter** key.
(<hostname of client> = insert the hostname of the computer where restore has to be repeated; e.g. command would be if restore for SYRCNYMAF16 is to be repeated:
restore_clients(space)\\10.10.16.1\c\$\IMS3_Backup(space)SYRCNYMAF16.)
5. Close the Command window by clicking on the **X** in the upper right corner.
6. Press **Ctrl-Alt-Del**. The Windows Security window is displayed.
7. Click on the **Shut Down...** button.
8. Select the **Restart** option in the list and click **OK**.
9. Confirm any dialog which may appear to let the computer reboot.
10. If you are at a site with four or five RICs, continue pressing the left **Shift** key during log on.
Log on as **usps admin** and continue with section 10.11, Perform a Fix to the ICS1.NS File.
11. If your are at a site with two RICs, continue with section 10.12, Initial IMS Application Startup.

10.11. PERFORM A FIX TO THE ICS1.NS FILE

Due to a known issue with the ICS1.NS file, a manual fix is required for the 4 RIC and 5 RIC configuration. Follow the instructions below:

1. Open a "cmd.exe" Command window.
 - a. On the Windows taskbar, select **Start** and **Run** (Figure 1-218).

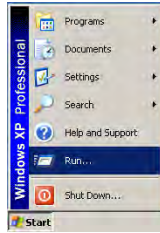


Figure 1-218. Run...

- b. The "Run" popup is displayed (Figure 1-219). Type in **cmd** and click on **OK**.

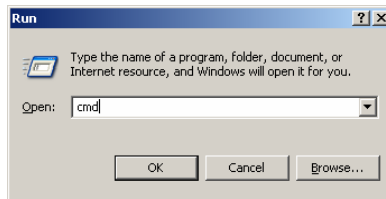


Figure 1-219. Run ... Window

- c. A "cmd.exe" command popup window is displayed (Figure 1-220).
2. Type **cd**_(space)**\cool_pers** and press the **Enter** key.
3. Type **notepad**_(space)**ics1.ns** and press the **Enter** key.

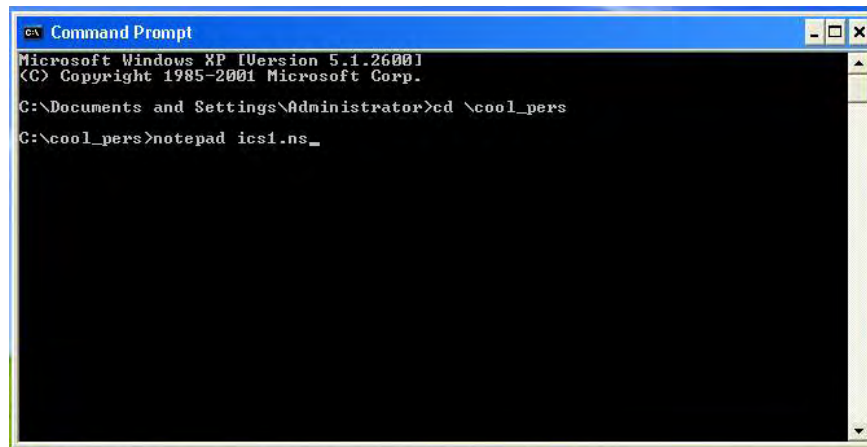


Figure 1-220. Start Notepad with ics1.ns

4. Notepad window is opened and a notification window pops up, "Cannot find the ics1.ns file. Do you want to create a new file?" (Figure 1-221). Click on **Yes**.

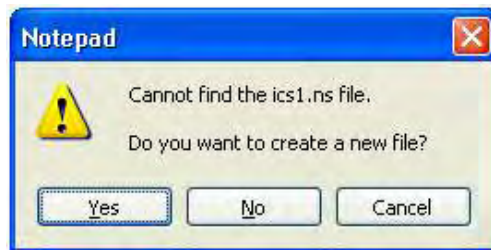


Figure 1-221. Create new File with notepad

NOTE

After typing the following commands, verify that there are NO additional spaces at the end of a line. And that in the last line, NO spaces and NO line feed at the end of the line. Only two spaces are allowed in each line: one before '0' and one after '_ic'.

The entries are case sensitive. Enter the commands EXACTLY as shown below.

Refer to Figure 1-222.

5. Installing a site with 4 RICs enter in Notepad:

```
/offlAssignment (space) 0/failed_ic (space) 1
/offlAssignment (space) 0/failed_ic (space) 2
/offlAssignment (space) 0/failed_ic (space) 3
/offlAssignment (space) 0/failed_ic (space) 4
```

At the end of the last line do not press Enter.

6. Installing a site with 5 RICs enter in Notepad:

```
/offlAssignment (space) 0/failed_ic (space) 1
/offlAssignment (space) 0/failed_ic (space) 2
/offlAssignment (space) 0/failed_ic (space) 3
/offlAssignment (space) 0/failed_ic (space) 4
/offlAssignment (space) 0/failed_ic (space) 5
```

At the end of the last line do not press the Enter key.



Figure 1-222. ICS1.NS in Notepad (4 RIC site)

7. Save the file (Figure 1-223).
8. Click on **X** to close Notepad.

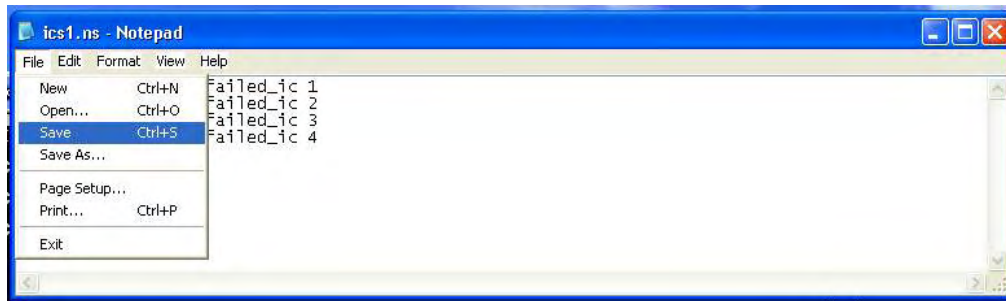


Figure 1-223. Save ics1.ns

9. Click in the open command line window.
10. Verify the content of the file.
11. Enter **type**(space)**ICS1.ns** at the prompt and press the **Enter** key.
Your file must look like the one in Figure 1-224 (exactly one space left of 0 and one space left of 1)

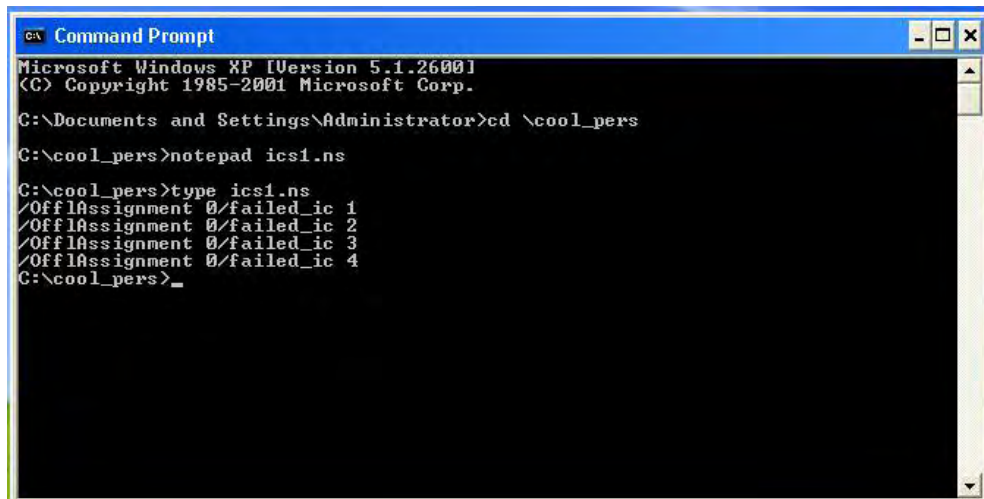
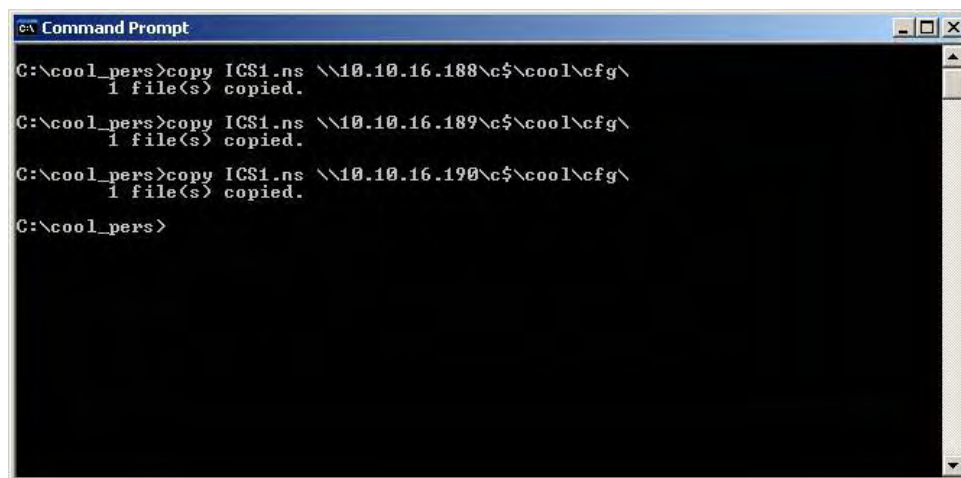


Figure 1-224. Verify ics1.ns

12. Copy files to the other computer with an IC (Figure 1-225).



```
c:\ Command Prompt

C:\cool_pers>copy ICS1.ns \\10.10.16.188\c$\cool\cfg\
1 file(s) copied.

C:\cool_pers>copy ICS1.ns \\10.10.16.189\c$\cool\cfg\
1 file(s) copied.

C:\cool_pers>copy ICS1.ns \\10.10.16.190\c$\cool\cfg\
1 file(s) copied.

C:\cool_pers>
```

Figure 1-225. Copy ics1.ns to other RICs

- a. Installing a site with 4 RICs enter at the prompt

copy(space)**ICS1.ns**(space)**\\10.10.16.188\c\$\cool\cfg** and press the **Enter** key
copy(space)**ICS1.ns**(space)**\\10.10.16.189\c\$\cool\cfg** and press the **Enter** key

- b. Installing a site with 5 RICs enter at the prompt

copy(space)**ICS1.ns**(space)**\\10.10.16.188\c\$\cool\cfg** and press the **Enter** key
copy(space)**ICS1.ns**(space)**\\10.10.16.189\c\$\cool\cfg** and press the **Enter** key
copy(space)**ICS1.ns**(space)**\\10.10.16.190\c\$\cool\cfg** and press the **Enter** key

13. Click on X to close DOS window.

14. Log off as 'usps admin'.

10.12. INITIAL IMS APPLICATION STARTUP

The purpose of this section is to start the IMS.

1. Proceed to the IMS cabinet accommodating the RIC computers.
2. Only for 2-RIC P&DCs:
 - a. Switch keyboard and monitor to RIC 01.
 - b. In the UI window "Logon", click on the checkbox **I agree**.
A check mark is displayed and the buttons Start System and Start Remote are enabled.
 - c. Click **Start System**.
 - d. Click **Start Remote**.
 - e. In the Start Remote VCS dialog, enter the IP of RIC 02: **10.10.16.187**.
 - f. Click on **Start**.
 - g. Wait until the input fields for Logon ID and password are enabled (white background)
(May take up to 10 min after a fresh installation.)
Enter **SEC Technician** for Logon ID and the appropriate password.
 - h. Click on **Logon**.
 - i. Click on **System** and **Start/Stop** on the "Supervisor User Interface" menu bar.
The "Coding System" window is displayed, indicating which Subsystems are:
 - Ready (green),
 - Not (yet) Ready (yellow),
 - In Malfunction (red).
 - j. Before proceeding, wait until both RICs are in the READY state.
3. Only for 4 and 5-RIC P&DCs:
 - a. Switch keyboard and monitor to RIC 03.
 - b. In the UI window "Logon", click on the checkbox **I agree**.
A check mark is displayed and the buttons Start System and Start Remote are enabled.
 - c. Click **Start System** to start RIC 03.
 - d. Click **Start Remote**.
 - e. In the Start Remote VCS dialog enter the IP of RIC 04: **10.10.16.189**.
 - f. Click on **Start** to start RIC 04.
 - g. Only for 5-RIC P&DCs:
 - 1) Click **Start Remote**.
 - 2) In the Start Remote VCS dialog, enter the IP of RIC 05: **10.10.16.190**.
 - 3) Click on **Start** to start RIC 05.
 - h. Wait until the input fields for Logon Id and password are enabled (white background)
(May take up to 10 min after a fresh installation.)
Enter **SEC Technician** for Logon ID and the appropriate password and click **Logon**.

- i. Click on **System** and **Start/Stop** on the "Supervisor User Interface" menu bar. The "Coding System" window is displayed, indicating which Subsystems are:
 - Ready (green),
 - Not (yet) Ready (yellow),
 - In Malfunction (red).
- j. Before proceeding, wait until all ICs are in state READY state.

NOTE

At this point, only the manually started RIC computers are visible in the supervisor UI.

10.13. STARTING THE REST OF THE IMS COMPUTERS

1. 2 RIC sites, switch keyboard and monitor to RIC 01.
2. 4 or 5 RIC sites, switch keyboard and monitor to RIC 03.
3. Get a hard copy of the siteconfig.ini file.
4. Repeat the following commands until all computers within the system are started:
 - a. Click **System** and **Start Remote**.
 - b. In the Start Remote VCS dialog, enter the IP of a computer (sequence: FSU, AFR-II, AFR-I, SUI), which is not yet started.
 - c. Click on **Start** to start the computer.
5. Wait until all components are available.
6. Verify that all computers, according to siteconfig.ini, are visible in the Start/Stop view.
7. Resend FSU results in Supervisor UI menu by selecting **Tools, MTOOL, PARS Tests**, and **Resend FSU results**. Confirm MTool popup window and close MTool window with by clicking on the **X** in the upper right corner.
8. Perform tour change, by selecting **Control** and **Change Tour** in the system menu of the Supervisor UI.

At this point, the IMS 4.0.1 is successfully installed.

10.14. INITIAL DICTIONARY DOWNLOAD FROM NDSS

To get the most recent dictionaries, an initial download from NDSS should be started soon after installation of IMS 4.0.1. Perform the following steps:

1. Go to RIC-1 if not already there.
2. If not already logged on, click on **I Agree** and **Start System**. Then log on as **SEC Technician**. On the "PARS Supervisor User Interface" window menu bar, select **Tools** and **Command shell**. A Command window will popup with the prompt "C:\cool>" displayed (Figure 1-226).
3. Type `cd\space)\cfg_srv\install_tools\bin` and press the **Enter** key. The prompt will change to "C:\cfg_srv\install_tools\bin".
4. Type `initial_dict_downloads.cmd` and press the **Enter** key.

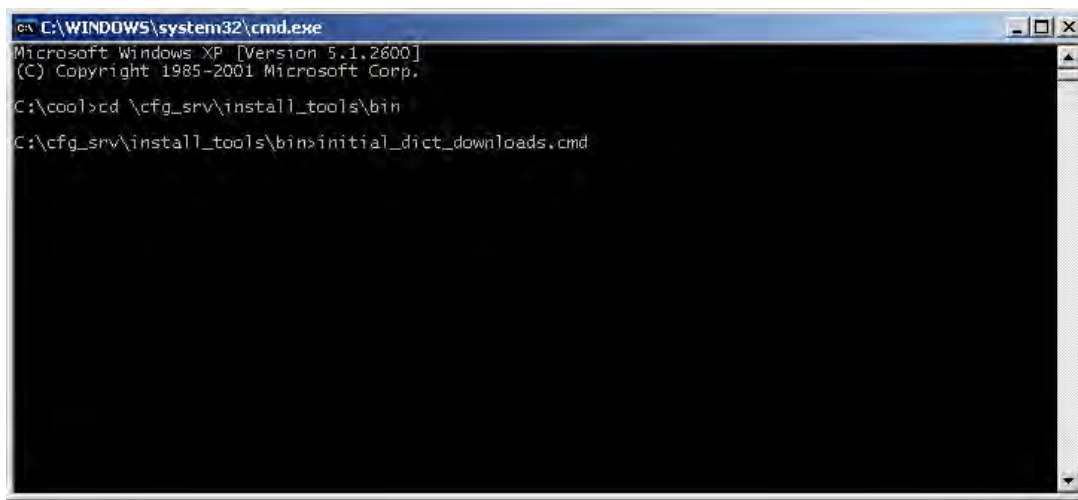


Figure 1-226. DOS Window - Start Download from NDSS

Additional DOS Windows will be opened during the download process (Figure 1-227).

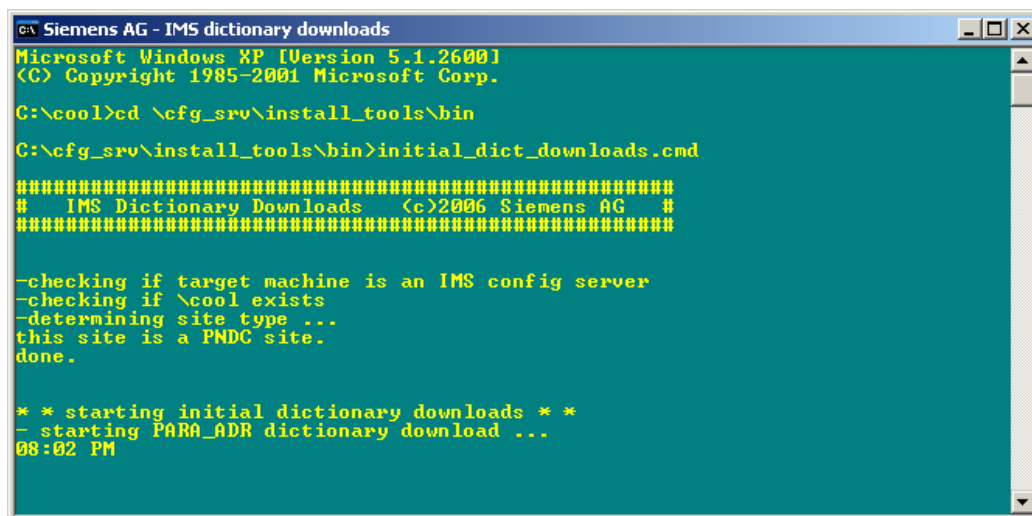
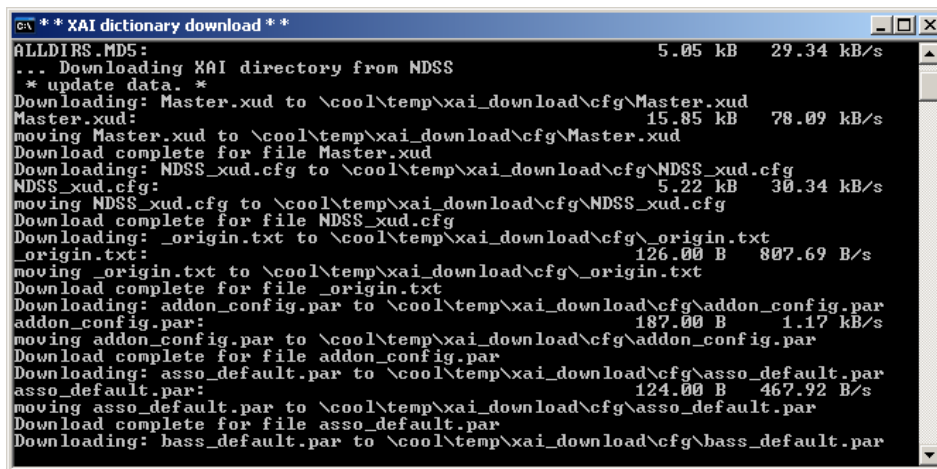


Figure 1-227. Starting Initial Dictionary Downloads

A second window pops up, showing the download (Figure 1-228).



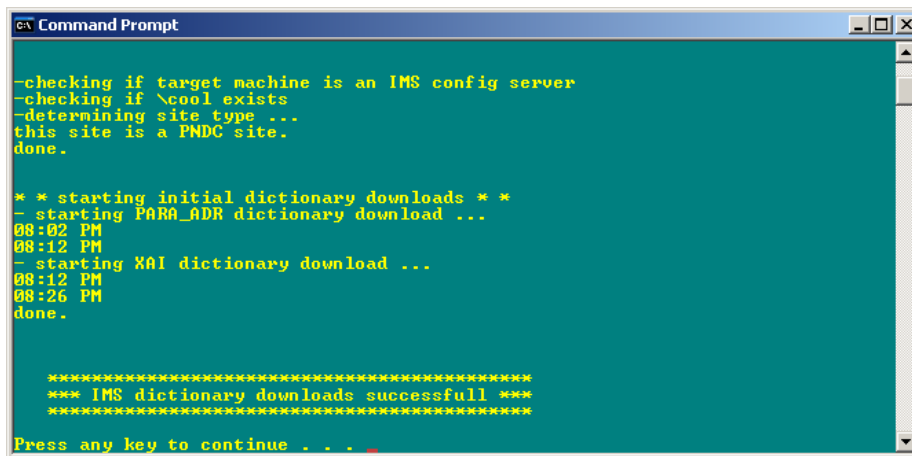
```

** XAI dictionary download **
ALLDIRS.MD5: 5.05 kB 29.34 kB/s
... Downloading XAI directory from NDSS
* update data. *
Downloading: Master.xud to \cool\temp\xai_download\cfg\Master.xud
Master.xud: 15.85 kB 78.09 kB/s
moving Master.xud to \cool\temp\xai_download\cfg\Master.xud
Download complete for file Master.xud
Downloading: NDSS_xud.cfg to \cool\temp\xai_download\cfg\NDSS_xud.cfg
NDSS_xud.cfg: 5.22 kB 30.34 kB/s
moving NDSS_xud.cfg to \cool\temp\xai_download\cfg\NDSS_xud.cfg
Download complete for file NDSS_xud.cfg
Downloading: _origin.txt to \cool\temp\xai_download\cfg\_origin.txt
_origin.txt: 126.00 B 807.69 B/s
moving _origin.txt to \cool\temp\xai_download\cfg\_origin.txt
Download complete for file _origin.txt
Downloading: addon_config.par to \cool\temp\xai_download\cfg\addon_config.par
addon_config.par: 187.00 B 1.17 kB/s
moving addon_config.par to \cool\temp\xai_download\cfg\addon_config.par
Download complete for file addon_config.par
Downloading: asso_default.par to \cool\temp\xai_download\cfg\asso_default.par
asso_default.par: 124.00 B 467.92 B/s
moving asso_default.par to \cool\temp\xai_download\cfg\asso_default.par
Download complete for file asso_default.par
Downloading: bass_default.par to \cool\temp\xai_download\cfg\bass_default.par

```

Figure 1-228. Downloading XAI Directory

A window is now displayed, indicating the downloads were successful (Figure 1-229).



```

c:\ Command Prompt

-Checking if target machine is an IMS config server
-Checking if \cool exists
-determining site type ...
this site is a PNDC site.
done.

* * starting initial dictionary downloads * *
- starting PARA_ADR dictionary download ...
08:02 PM
08:12 PM
- starting XAI dictionary download ...
08:12 PM
08:26 PM
done.

*****
*** IMS dictionary downloads successfull ***
*****

Press any key to continue . . .

```

Figure 1-229. IMS Dictionary Downloads Successful

5. When prompted to "Press any key...", type **Exit** and press the **Enter** key to close the window (Figure 1-230).

```

C:\ Command Prompt
-checking if target machine is an IMS config server
-checking if \cool exists
-determining site type ...
this site is a PNDC site.
done.

* * starting initial dictionary downloads * *
- starting PARA_ADR dictionary download ...
08:02 PM
08:12 PM
- starting XAI dictionary download ...
08:12 PM
08:26 PM
done.

*****
*** IMS dictionary downloads successfull ***
*****

Press any key to continue . . .
C:\cfg_srv\install_tools\bin>exit

```

Figure 1-230. IMS Dictionary Downloads Done

10.15. TROUBLE-SHOOTING AND ERROR EXPLANATION

10.15.1. Trouble shooting

- For problems after having clicked "Deploy" in the Install UI, go to section 10.15.1.1.
- For problems during re-installation go to section 10.15.1.2.
- For problems with the installer interface and the Install Control Service go to section 10.15.1.3.
- For problems with the Prepare Deploy Tool go to 10.15.1.4.

10.15.1.1 Problems during deployment

This section is for solving problems which may occur during deployment. If you clicked Deploy in the Install UI and the installation did not work as expected, proceed as described below. Follow the steps in order and execute the first that corresponds to your situation:

NOTE

The First RIC (which is also the InstallServer) must be installed before the other computers. For this, the deployment is a two step process: The first click to "Deploy" installs only the First RIC, all other clients use second click to "Deploy". This is true in the trouble shooting case. The First RIC must be installed successfully before the other computers. Even if a reinstall on a fresh OS image is necessary. If the First RIC is in trouble, the term "one or a few computers" always means "one computer", i.e. the First RIC. Ignore all other computers and their state while dealing with the First RIC. Read the following instructions, assuming your site only consists of the First RIC.

1. You have clicked Deploy and nothing happens within 10 minutes. In case of an Update Installation, ensure the media containing the new PARS release is installed to the First RIC computer. If this is the case, call the MTSC HelpDesk. (It is assumed that there is a major problem with the Setup itself.)
2. There is no reaction of one or more computers.

If your site consists of many computers, not all computers will actually be installed in parallel. It is normal that some computers may not start installation while others have installed successfully. A computer is considered non-reactive if there is no activity at all in the Logfile view of the Install UI for 30 minutes. Check the configuration of the computers with a **foreach_comp -p check_compname.bat** command from a CMD window. If the configuration is correct, continue with section 10.8.1, Connection Test on page 139. If the command results in errors, correct the configuration and then reinstall the computer as described in step 6 below.

3. Check for possible error code. Watch out for error codes in the LogFile View. If there is an error number, lookup the table in section 10.15.2, Error Codes to see if the error is listed there for an explanation and a possible fix. Unless otherwise noted, proceed with the next step.
4. Many computers are in “error” or hang.

At a site with approximately 100 computers, it may occur that 25 computers keep hanging in “yellow” state, although the client computers are actually properly installed. In such a case, the correct status messages could not be transferred from the clients to the server. If you are an expert, you can run the `c:\cfg_srv\install_tools\bin\collect_logs.bat` command. This collects all installation log files from all clients on the First RIC under `c:\cfg_srv\collected_logs`. In this folder, look for subfolders such as the clients in question and check the file `ctrl_client.log` to see what happened on these clients. If they are actually installed correctly, perform a reinstall on these clients just for the purpose of resending of the status messages to the server. Otherwise, call the MTSC HelpDesk. (Assume that there is a major problem with the Setup itself.)

5. One or a few computers hanging in “yellow” state.

A computer is hanging when there is no action for 50 minutes (30 minutes for a RIC). You can check the last activity status changes in the 'Computers' view and in the 'Logfile' view to detect this. There is one reason for “yellow state hanging” which can be fixed easily. This is the case of the computer hanging during a Windows reboot. To check this, perform the following command **foreach_comp -p check_compname.bat** in a CMD window. If a computer can be ping'ed successfully but the check of COMPUTERNAME and hostname fails for a computer, (inspect output of the `foreach_comp` command!) then you have a computer in such a state. Switch that computer off and then on again to fix this. Perform another `check_compname` to check if fixed. Such a computer will then continue installation. Wait until finished. Proceed with the next step if there are still “yellow state computers” or computers in error (red state).

6. One or a few computers in “error”.

The computer may continue installation despite the error. This depends on whether the error is issued by an individual component installation. In this case, the subsequent components get installed anyway. When there is no action for 50 minutes (30 minutes for a RIC) and the computer remains in error state, then nothing more will happen for the specific computer. Continue with the next step.

7. One or a few computers need a reinstall.

The First RIC must not be reinstalled if it is in state "successfully installed" AND if there are pending installations for the other clients. (Background: otherwise ALL computers would try to install simultaneously, which can result in chaos because the First RIC will perform reboots and would not be available for the clients all the time.) States "successfully installed" and pending installations cannot happen in a regular Update Installation.

- a. Perform a reinstall as described in section 10.15.1.2. If this is successful, continue with the instructions if all computers are now ok.
- b. Otherwise, reboot the computer by switching it off and on again and perform another reinstall as described in section 10.15.1.2. If this is successful, resume the instructions if all computers are now ok.
- c. Otherwise, perform a Reinstall on a freshly installed OS image as follows:

NOTE

If any RIC has to be reinstalled based on a fresh OS image, this RIC must not be started first, when the IMS is started after installation. This is very important! The RIC started first gets master, which means that the databases of the other RICs get synchronised with this master. This is undesired since in general, this RIC does not have proper database contents. This holds true for both, First RIC and other RICs. The First RIC will not get its data restored normally and the redundancy of the system is utilized. Note each freshly reinstalled RIC in your installation check list under "Start Sequence of RIC computers". This will be needed as a reminder when starting the system.

8. If it is the First RIC:
 - a. Prepare the First RIC with a fresh OS image as described in section 10.5 and perform the basic host configuration.
 - b. Create **c:\cfg_srv** directory and copy the **siteconfig.ini**, contained in the saved data save_data_1stric on your backup computer.
 - c. Install First RIC as if this was an Initial Installation. Follow section 10.7 to do so, but with the following changes:
 - 1) Delete all computers except the First RIC from the "Installation" section in siteconfig.ini by using the SiteConfigEditor. No other configuration has to be done in SiteConfigEditor.
 - 2) Do not start the application (First RIC) then.
 - d. Stop the Install Control Service.
 - e. Save **c:\cfg_srv\install_tools\siteconfig_dpl.ini** to **siteconfig_dpl_1stric.ini** and save **c:\cfg_srv\install_tools\ctrl_install.lst** to **ctrl_install_1stric.ini**.
 - f. Restore the following files saved data from your backup computer: copy **siteconfig.ini**, **ctrl_install.lst** and **siteconfig_dpl.ini** back to First RIC to the locations **c:\cfg_srv** and **c:\cfg_srv\install_tools** resp.

- g. Use a text editor (Notepad) to merge the one line in **siteconfig_dpl_1stric.ini**, under the Installation section describing the First RIC, into the file **siteconfig_dpl.ini**. Overwrite the line describing the First RIC line there. Do the same with the **ctrl_install.lst**.
 - h. Start the Install Control Service.
 - i. The First RIC is now successfully installed and the installation is in state as if the first "Deploy" was performed successfully. Resume with the installation instructions with the second Deploy.
9. Otherwise, if it is one of the other computers, perform the following:
- a. Prepare the computer with a fresh OS image as described in section 10.5 and perform the basic host configuration.
 - b. Connect computer to the network.
 - c. Check that this computer is ok, using Connection Test in the Install UI.
 - d. Perform a reinstall as described in section 10.15.1.2.
 - e. If computers remain problematic, call the MTSC HelpDesk.

10.15.1.2 Using the Reinstall Feature of the Install UI

Overview

The Reinstall feature of the Install UI allows you to install a computer as if it had not been installed. Reinstall is used for the following situations during installation:

- Try to reinstall a computer that did not install properly.
- Install a computer after it has received a fresh OS image (new installed from Ghost image).
- The reinstall has support to provide a total reinstall over an incomplete or complete installation. There are situations where a reinstall may not succeed: when a prior de-installation was not complete or unsuccessful, or when a new version of a MSI oriented component is installed directly over the old version. The reinstall does supports some important reinstall cases, most notably, when the prior installation has failed in its initial phase (InitClient component). Also, reinstalling the same versions is not a problem.

NOTE

Directly over installing different versions can be successful when the component is not a MSI installable component (for example the IMS packages RIC, IH, IC... are not, whereas UI, MSDE are MSI installable components). When installing on a fresh Windows XP computer, installing and reinstalling makes no difference regarding the client computer. However, viewed from the server side (Install Server), it does makes a difference. Reinstallation here means: Installation of a computer that has been installed before (successfully or not), i.e. the computer is in the list of installed or handled computers. Install the computer regardless of the actual status in the Install UI and treat it as if it was not installed. All configured components will be installed by a reinstall.

Starting the Install UI

Reinstall one or more computers:

1. Make sure you are logged in under the 'usps admin' account (or under SDInstall) on the First RIC computer.
2. Verify IP addresses, computer name, and network connection (only if reinstall on fresh OS). Perform a "Connection Test" inside the Install UI. If one or more computers fail, verify network settings. Refer to section 10.8.1.
3. Start the Install UI from desktop icon "Install User Interface" (if not already started). The example in Figure 1-231 assumes the RIC-2 hangs in yellow state and should be reinstalled.

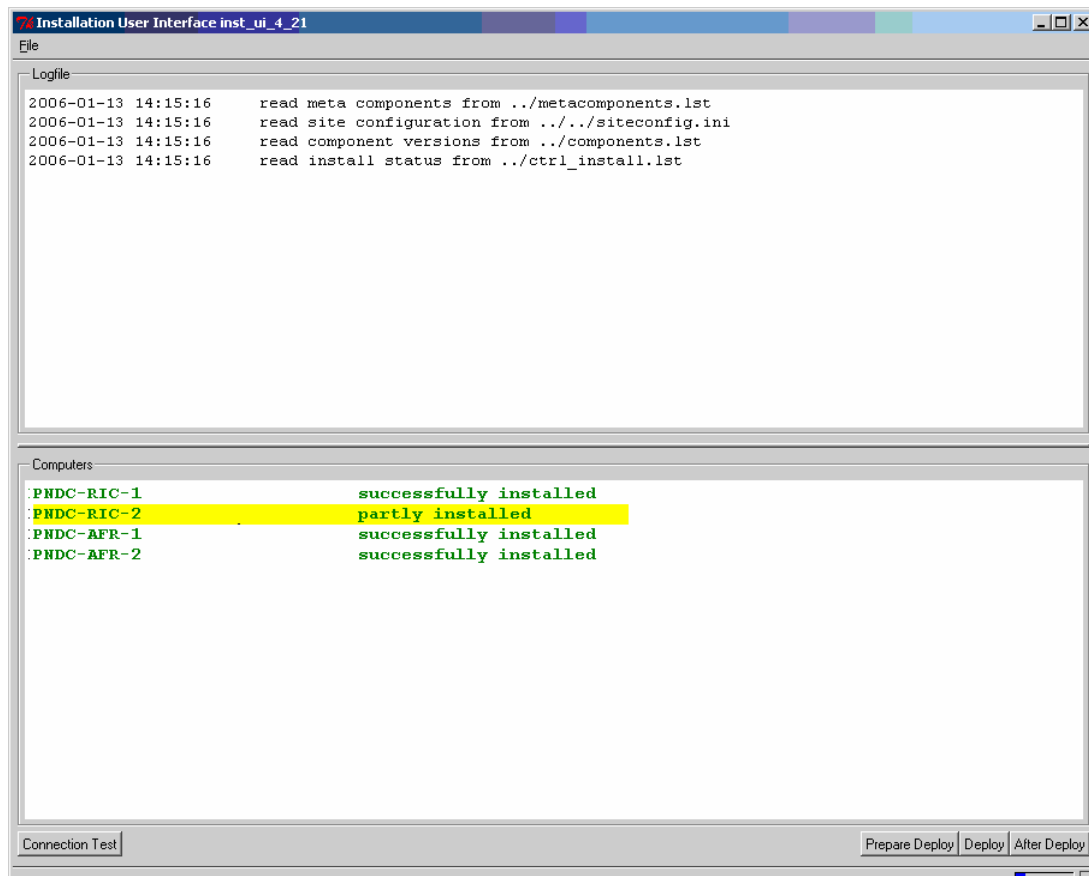


Figure 1-231. Install UI Showing RIC-2 "Hanging"

Selection of the computers to be reinstalled**CAUTION**

NEVER reinstall the Install Server computer (First RIC) simultaneously with other computers. This has a significant risk of leaving the IMS software system in an unusable state. The Install Server computer will be rebooted while other computers being reinstalled are trying to contact the Install Server computer. This will cause the non-Install Servers in an indeterminate state.

1. In the 'Computers' view, highlight the line with the computer to be reinstalled (Figure 1-232).

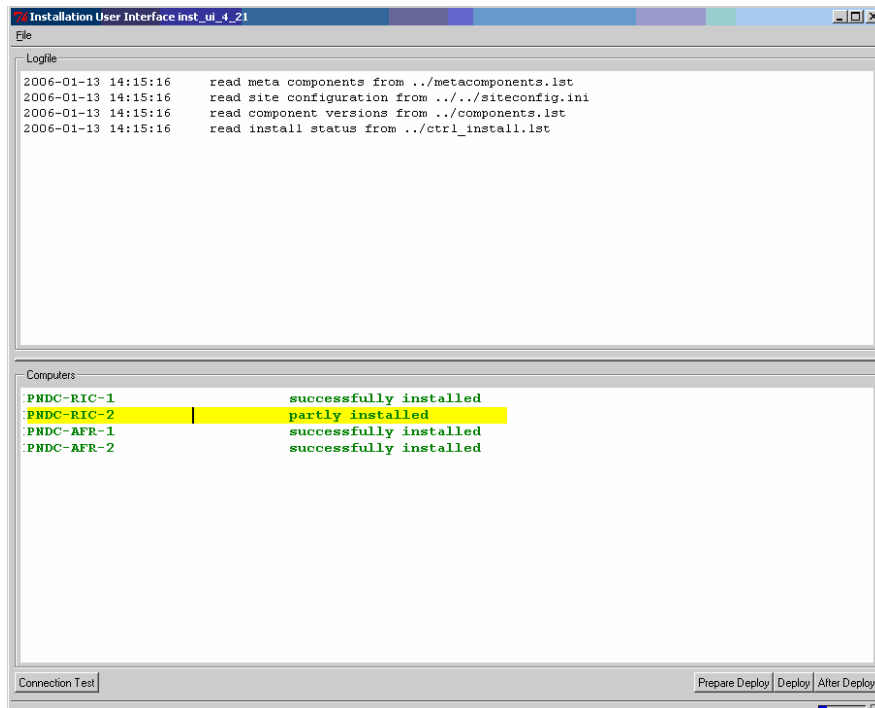


Figure 1-232. Install UI showing RIC-2 selected

NOTE

The 'LogFile' view also gives an appropriate message. R can be typed again to remove the reinstall mark in case the wrong computer was selected. You can toggle back and forth as many times you like (as long as you do not 'Deploy').

NOTE

You can mark several computers to be reinstalled. The Install UI does not restrict this, but trouble-shooting normally recommends reinstalling only one computer at a time.

2. Type the character **R**. The Install UI marks this computer as one to be reinstalled (Figure 1-233).

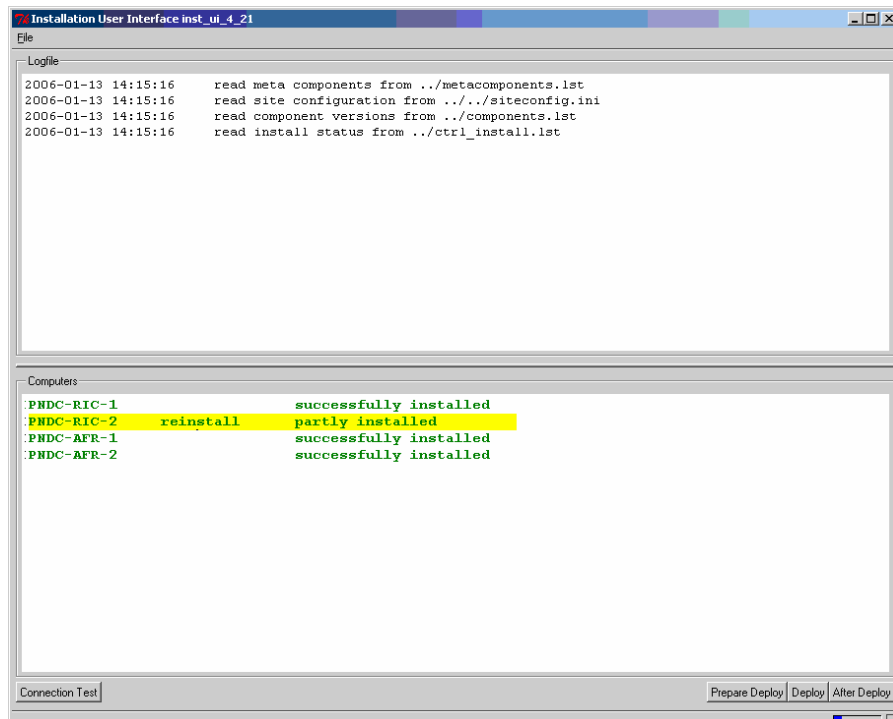


Figure 1-233. Install UI Showing RIC-2 Switch to Reinstall

Deployment of the selected computers

1. Click on **Deploy**. Normal deployment sequence of actions occur. Review the 'LogFile' for indications of a successful deployment. When the 'Deploy' phase has passed all checks and system generations successfully, the computers marked for reinstallation will be reinstalled automatically. Take no further actions until the computers are 'successfully installed' (Figure 1-234).

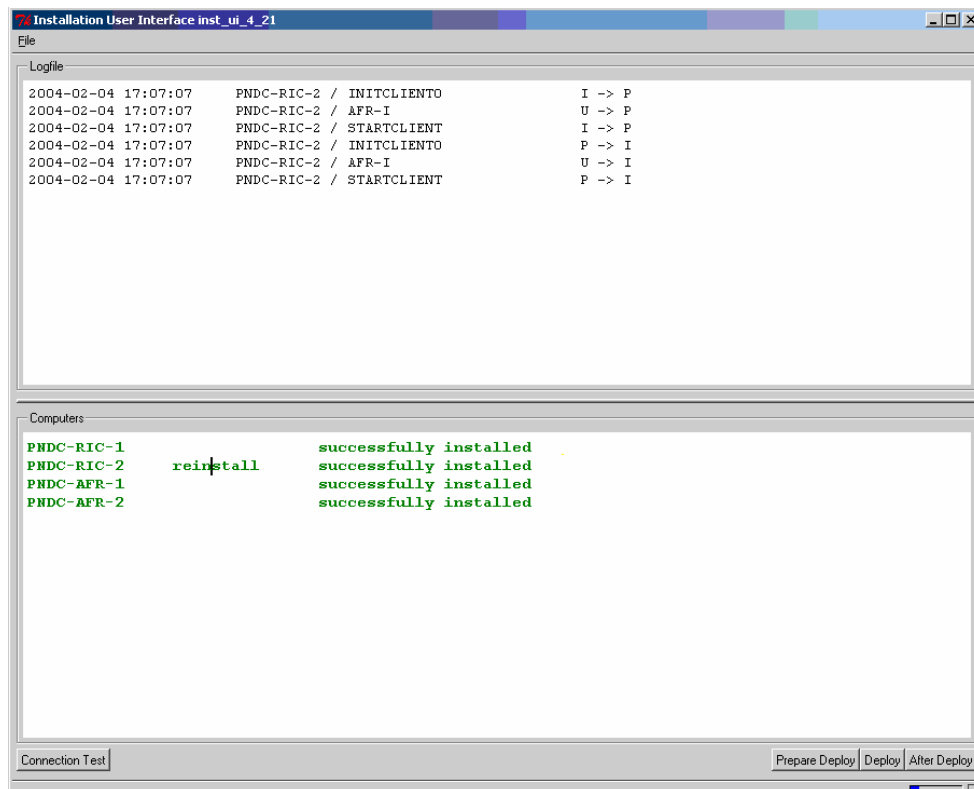


Figure 1-234. Install UI Showing RIC-2 Successfully Reinstalled

2. In case of an unsuccessful installation that results in a computer ending up in a hanging in yellow state or in ***** Error *****, follow the instructions that lead you here (typically another reinstall on a fresh Windows XP computer will be the next step).
3. Regardless of the end state of the reinstallation, proceed to clean up the reinstall. This is important!

Removal of the "reinstall" flags

1. For each reinstalled computer, click its line and type **R**. The reinstall marks will disappear (Figure 1-235).

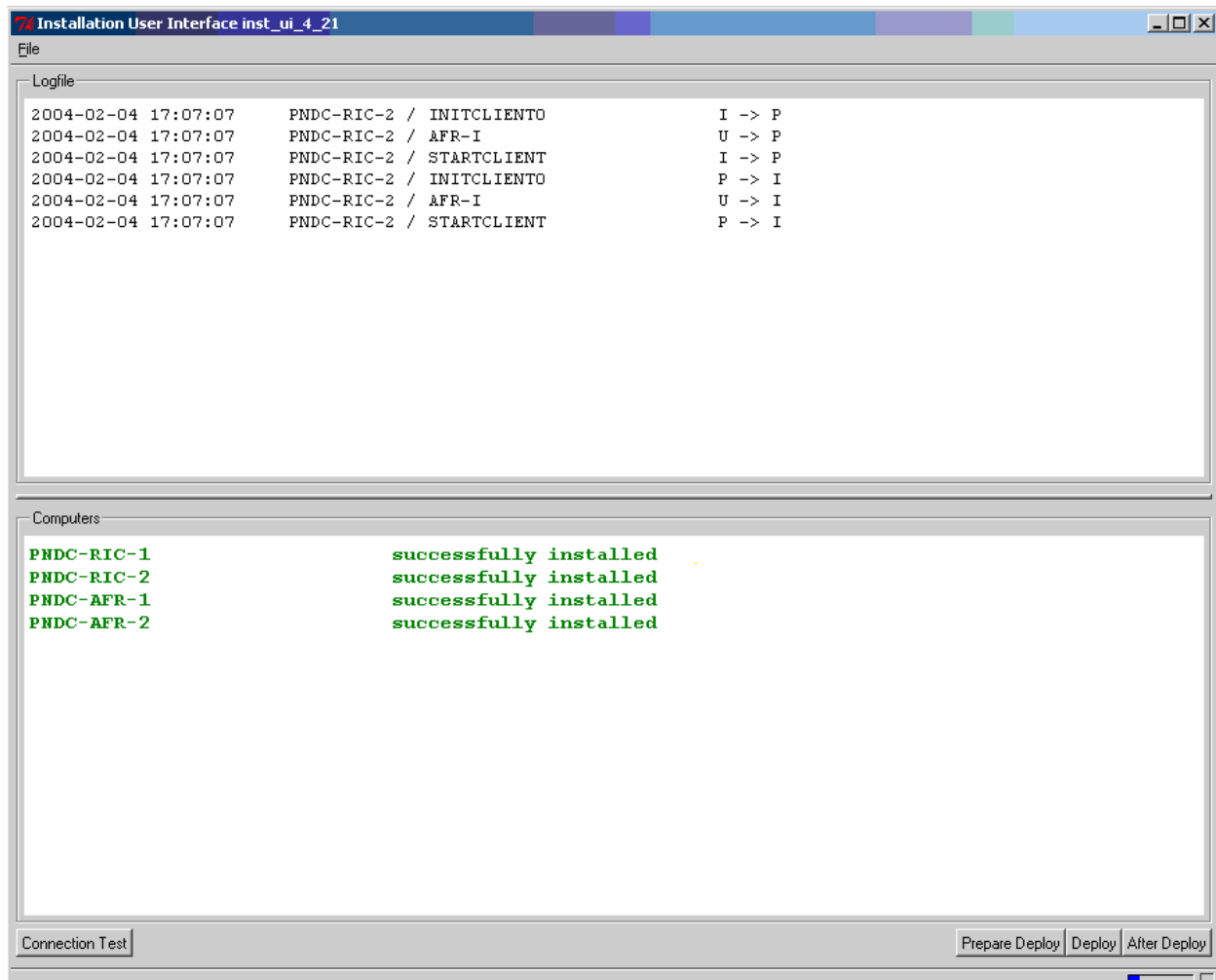


Figure 1-235. Install UI Showing Reinstall Switched off for RIC-2

2. Click **Deploy** again. This will not start another deployment. The purpose of this 'Deploy' is to tell the Controller Server to remove its internal (R)e-install flag. When this is not done, a subsequent reinstall will not have any effect. Internal: the R flag is removed from the appropriate computer in the file ctrl_install.lst. When you leave the Install UI and enter it again, the ctrl_install.lst (and the R flags) will be read again. When there are reinstall lines in the 'Computers' view after the reload, then the flags haven't been reset and you can be sure that a 'Deploy' won't actually do a reinstall.

10.15.1.3 Installers Control Service

Adjusting the Installers Interface Files

Adjusting ctrl_install.lst

The contents of the file c:\cfg_srv\install_tools\ctrl_install.lst reflect the “confirmed deployment view”. The Install UI substantially displays the information in this file in its “Computers” window and its changes in the ‘Logfile’ view.

For example, in case the Installer mechanism was bypassed in some way, it might be necessary to manually adjust the confirmed deployment view.

Each line of the ctrl_install.lst describes one computer. A line might look like the one below (in fact it is one long line):

```
ORLNFLMRIC1=0.0.0.0 89.11.11.250 [-]
INITCLIENT[I;InitClient_2004.2.27.21.49;0],RIC[I;RIC_2004.2.27.21.33;0],MSDE[I;MSDE_8
.0.3;0],RPT_SRV[I;Rpt_Srv_1.0.4.3;0],UI_SYS[I;UI_SYS_2004.02;0],UI[I;UI_5.2.0.397;0],P
FSU[I;PFSU_2004.2.26.14.44;0],STARTCLIENT[I;StartClient_2004.2.26.14.44;0]
```

This gives the computer’s name on the left side of the equal sign. On the right side you have:

IP address (the 0.0.0.0 has no meaning), 89.11.11.250 in the example

Followed by the

Reinstall Flag:[-] in the example. This means unset. When set, you would have [R]

Followed by the status of all actually installed packages. For example:

```
UI[I;UI_5.2.0.397;0]
```

Describes the UI package which has status ‘I’nstalled, the installed version is ‘UI_5.2.0.397’ and the error number is 0. The status characters can have the following values:

- [I; package successfully installed
- [E; package in error. Error number is set (to non zero)
- [-; uninitialized. Means not installed / not processed yet.
- [P; package is being installed (install in progress).

CAUTION

Manipulating this file requires understanding the impact. Do not change something that you do not fully understand. For example, when you delete all lines of ctrl_install.lst, the Controller concludes that all computers are uninstalled and will start installing the complete site, which is probably not intended and has severe impact.

Example for manipulation of ctrl_install.lst:

- You know that the computers software is running well, but in the Install UI, the computer is in yellow state. This means that one or more packages are in state [- or [P. You want to set all packages to [I in order to get this nice green “successfully installed” message in the Install UI.

- Stop the Install Control Service.
- Edit the ctrl_install.lst with notepad or wordpad: Change all components of the computer in question to [I
- Save the changes.
- Start the Install Control Service

Setting up the Install Control Service

The installing process requires a special service where every computer configured for the site can connect to. Normally the Service is setup automatically by the Setup and you do not need to deal with it at all. But, situations may arise where you need to either stop the service or need to properly configure and start it. The latter may happen in case a previous installation has stopped the service and/or set to Startup Type "Manual". In general, there are several things which need to be ok:

- It must be installed (appear as Windows Service)
- It must run (i.e. be started, not stopped)
- It must run under the correct account (= usps admin)
- It must run with the correct Startup Type (Automatic)

Achieving this is described in the subsections below. The Install UI checks the proper state each time you click 'Deploy'. That means you can fix just one configuration issue and try another 'Deploy' and see what happens.

The proper state of the Service is showed in the screen shot in Figure 1-236. This screen can be accessed by choosing **Start, Settings, Control Panel, Performance and Maintenance, Administrative Tools, Services**, and the **Standard Tab**.

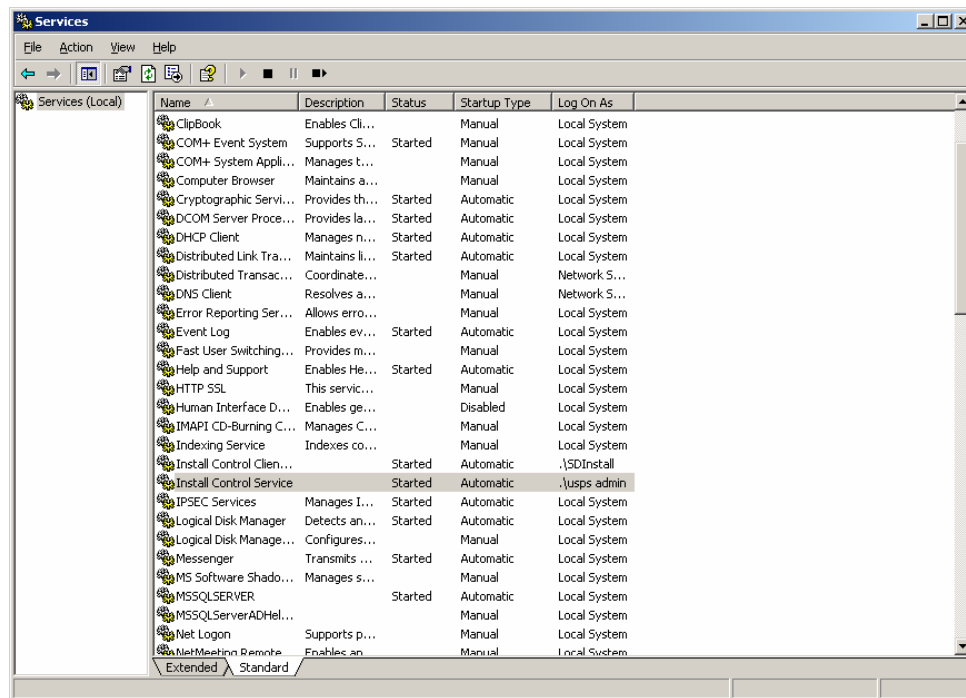


Figure 1-236. Windows Services window, Service started

Installing the Install Control Service

1. Select **Start, Settings, Control Panel, Administrative Tools**, and **Services**. There has to be an entry "Install Control Service". If so, you do not need this subsection. If the Install Control Service entry is missing from the list of services, you can create it.
2. Close the Services window if open. Otherwise, the following operation may fail.
3. Open a cmd window and execute the following commands:


```
> cd c:\cfg_srv\install_tools\bin
> Controller_S.exe -install
```

 If it is successfully completed, the message, "Install Control Service installed." is displayed.

The Install Control Service entry is located in the list of services.

4. If this message is not displayed, you might need to properly remove the service first by executing the following command:

```
> Controller_S.exe -remove
```

The message: "Install Control Service removed." is displayed.

Now try another install. If all fails, reboot the First RIC and retry.

Starting the Install Control Service

1. Select **Start, Settings, Control Panel, Administrative Tools**, and **Services** to get the Services window. If the Service appears stopped, you can start it.
2. Double click on **Install Control Service**.
3. Click on the **Log On** tab and enable the radio button next to **This account** (Figure 1-237).
4. Click on **Browse**, select the **usps admin** user, and click on **OK**.
5. Enter the password in the 'Password' field and in the 'Confirm password' field.
6. Click on **Apply**.

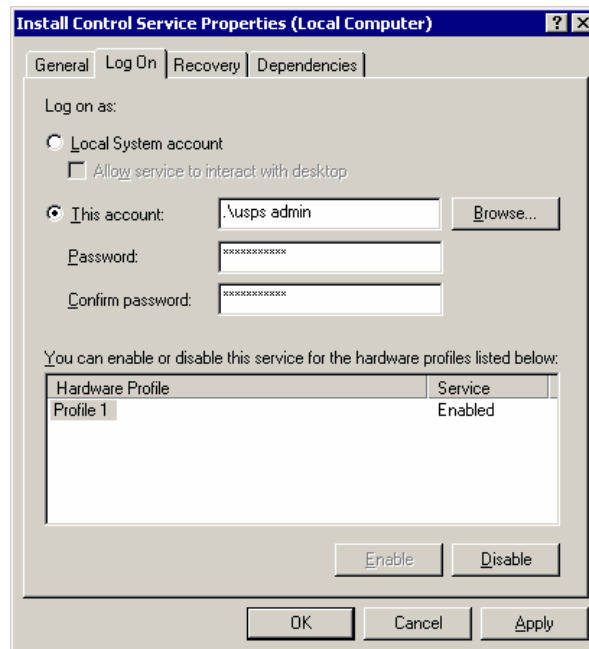


Figure 1-237. Install Control Service Properties Logon tab

7. The window in Figure 1-238 might popup, which informs you that 'usps admin' has been granted the right to run a service. Click on **OK**.

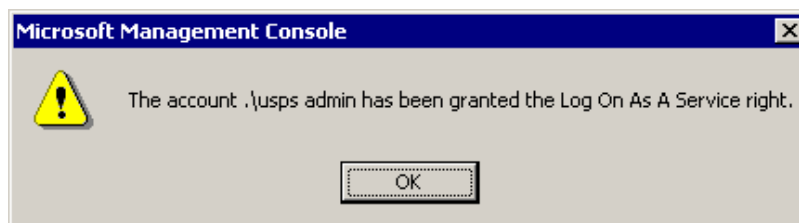


Figure 1-238. Confirmation of granted Logon as Service right

8. The dialog box in Figure 1-239 might be displayed, which asks the user to stop the service again. This can be ignored and the box can be dismissed by pressing **OK**.

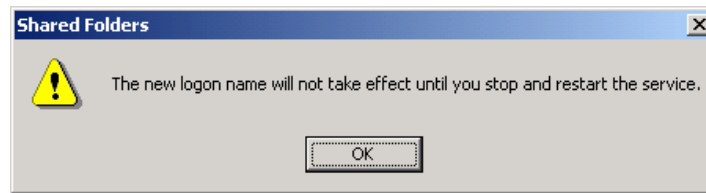


Figure 1-239. Confirmation of Restart Service Hint

9. Click on the **General** tab (Figure 1-240).
10. Click **Start** to start the service.

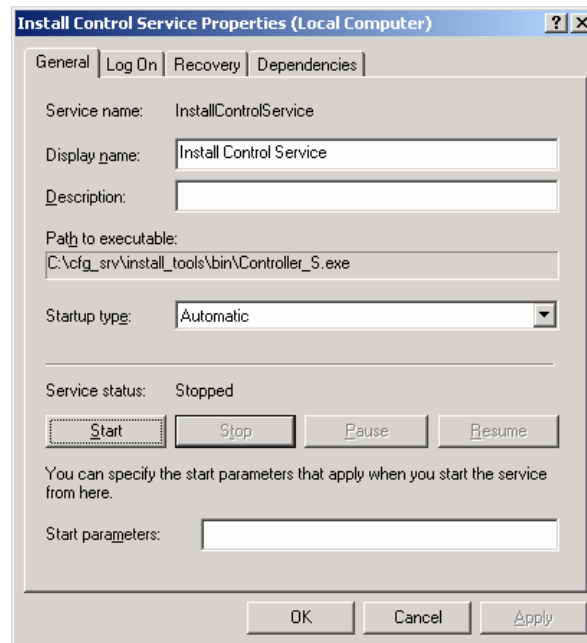


Figure 1-240. Install Control Service Properties General Tab

The screen in Figure 1-241 will be briefly displayed while the service is starting up. The screen will automatically close.

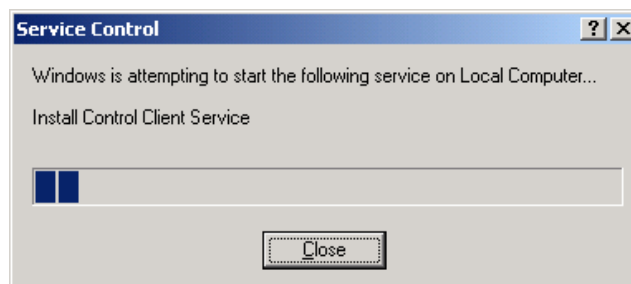


Figure 1-241. Install Control Service Starting Progress Bar

11. The screen in Figure 1-242 is displayed again with the 'Start' button now grayed-out. Click **OK** to dismiss the window.

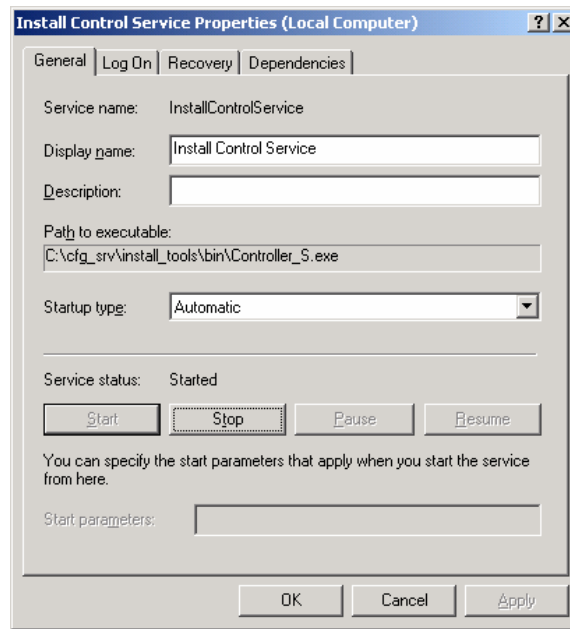


Figure 1-242. Install Control Service Started Status

The Install Control service has now been properly installed and started.

Configuring Startup Type of Install Control Service

1. Choose **Start, Settings, Control Panel, Administrative Tools**, and **Services** to get the Services window. If the Service appears to have Startup Type "Automatic", everything is fine and this subsection is not needed.

2. Adjust the correct Startup:
 - a. Double click on the **Install Control Service** icon shown in the Services window. The following screen is displayed (Figure 1-243).
 - b. Set Startup type to **Automatic** and click **Apply**
 - c. Click **Ok** to exit this dialog.

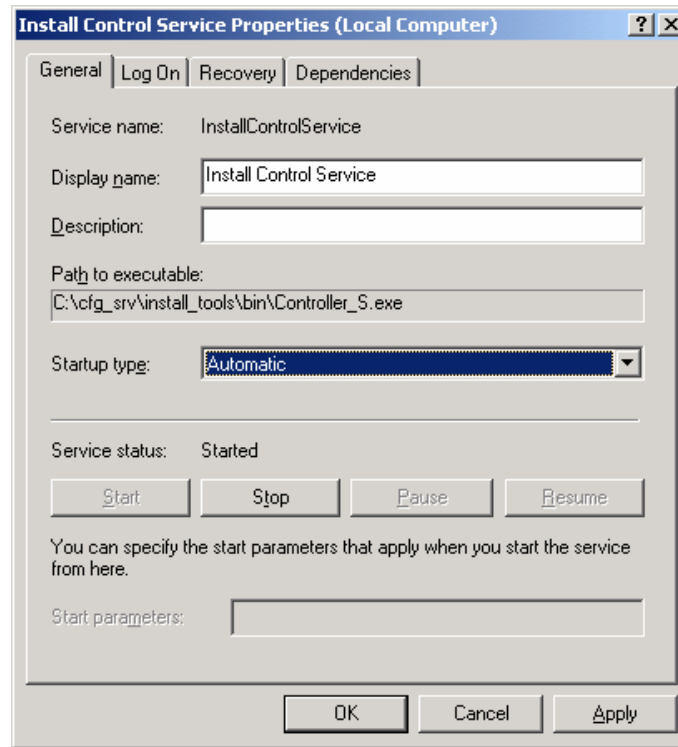


Figure 1-243. Install Control Service Change to Manual

Disabling the Install Control Service

Disabling the Install Control Service is normally not necessary. It consists of two steps:

- Stop Install Control Service
 - Disable Install Control Service
1. Choose **Start, Settings, Control Panel, Administrative Tools**, and **Services** to get the Services window. If the Service appears to have Startup Type “Automatic”, everything is fine and you do not need this subsection.

2. Double click on the **Install Control Service** icon shown in the Services window. The window in Figure 1-244 is displayed.
3. Select the **Stop** button to stop the service.

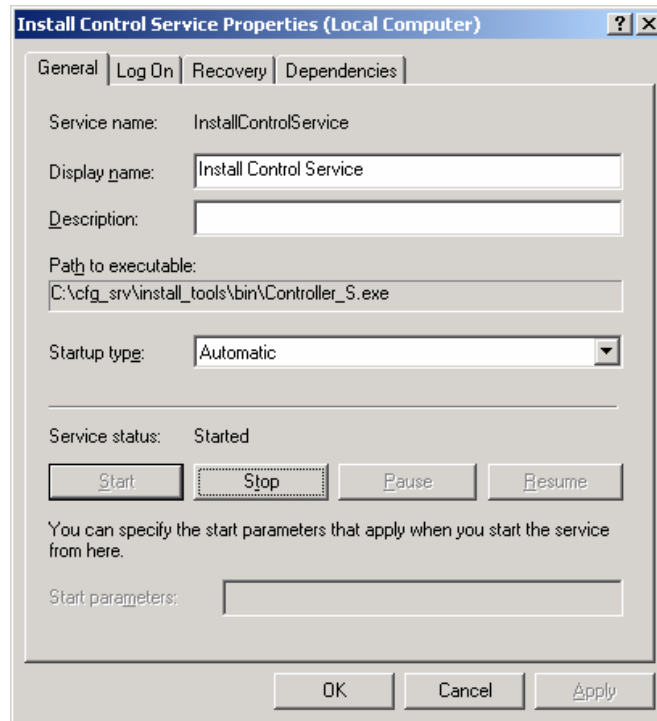


Figure 1-244. Stop Install Control Service

4. Set Startup type to **Disabled** and click **Apply** (Figure 1-245).
5. Click **OK** to close the window.

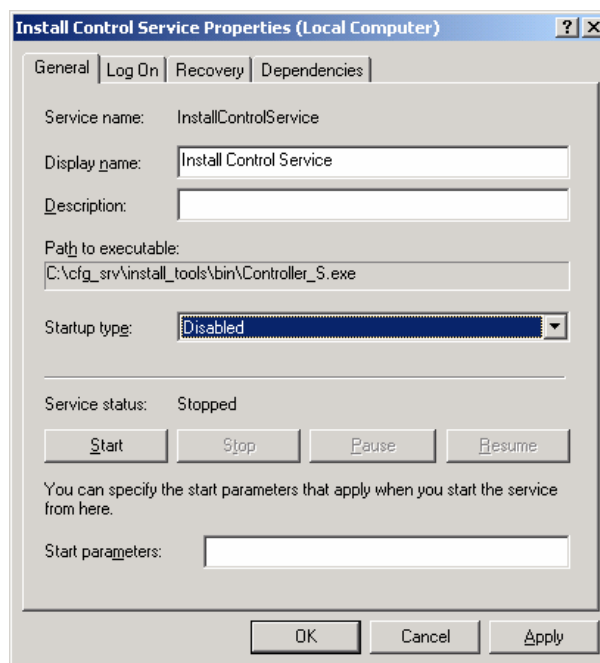


Figure 1-245. Disable Control Service

Stopping the Install Control Service

Stopping the Install Control Service is normally not necessary.

1. Choose **Start, Settings, Control Panel, Administrative Tools, and Services** to get the Services window. If the Service appears to have Startup Type “Automatic”, everything is fine and you do not need this subsection.
2. Double click on the **Install Control Service** icon shown in the Services window. The “Install Control Service Properties” window is displayed (Figure 1-246).
3. Select **Stop** to stop the service.
4. Click **OK** to close the window.

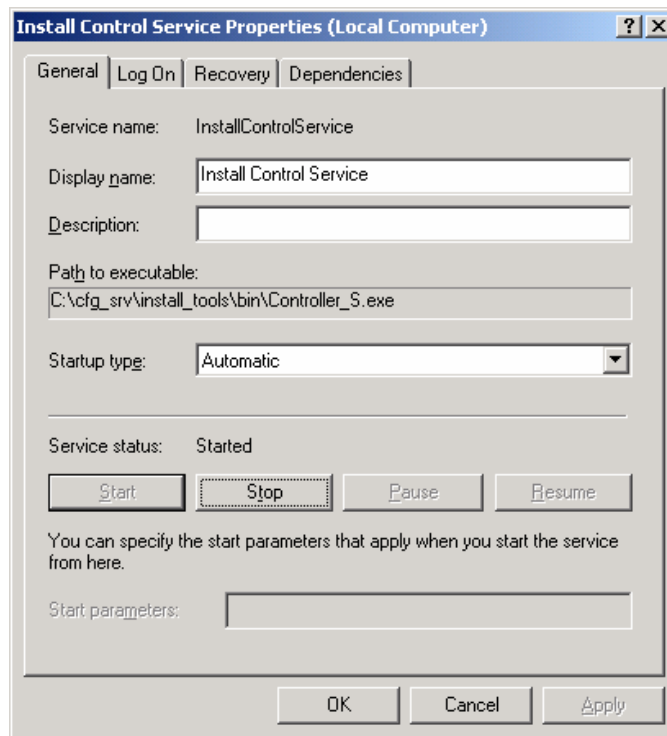


Figure 1-246. Stop Install Control Service

For many cases, the information given in the "INFORMATION WINDOW" is self-explanatory. Consider the following:

Error in my_ping.bat:

Check if the computer is switched off or the network cable is unplugged and eventually fix the problem.

NOTE

In the Deployment Editor, the use case "remove computer" is not fully supported yet.

Supported so far is: A computer configured out from siteconfig.ini with Deployment Editor will no longer lead to errors in the foreach command. This computer will not be installed.

Not supported is: The computer does not get removed from all internal housekeeping lists. This results in warning messages in the InstallUI during deployment. These are harmless and can be ignored.

If a computer is out of order, you may want to remove it from the configuration, via the Deployment Editor.

Error in check_compname.bat

If a ping to the computer name fails, then there may be a problem. The communication during the Install does not rely on computer names, only on the IP address (as there is not reliable naming service needed by concept), so this may be valid.

If the check of the computer's name fails, then there is a problem which must be fixed. Either your siteconfig.ini-defined name is wrong or the computer has the wrong name. The computer names must be correct for the Install mechanism to find the correct directories on the First RIC. Select every computer shown in the "PROBLEM PC SELECTION" window, get the corresponding error information, and fix the problems. Note that some preparation steps like, prep_replace_client_c.bat, can fail for certain transient reasons but will succeed without any fix when performed a second time. Then close the two additional windows and click **Start/Restart** in the Prepare Deploy Display window to resume processing of the preparation steps. Each computer will continue where it bailed out. You can click 'Start/Restart' and resume processing multiple times. You should actually try 'Start/Restart' at least twice before deciding the whole deployment preparation has failed.

10.15.1.5 Uninstall of IMS components

If an IMS component is configured by mistake, follow the next steps:

NOTE

The examples in the next steps are taken from a P&DC site.

1. Move to the "PARS Supervisor User Interface" screen, located on the First RIC (install server).
2. If not already logged on, log on to the IMS application as **SEC Technician**.
3. Open the Start/Stop frame by selecting **System** and **Start/Stop** on the "Supervisor User Interface" menu bar. The "Coding System" window is displayed (Figure 1-248).
4. In the "Subsystems" field, highlight the system with component configured by mistake and select the IP address. This enables the corresponding action buttons on the right hand side of the window.
5. Write down IP address of the system.
6. Click on **STOP**.

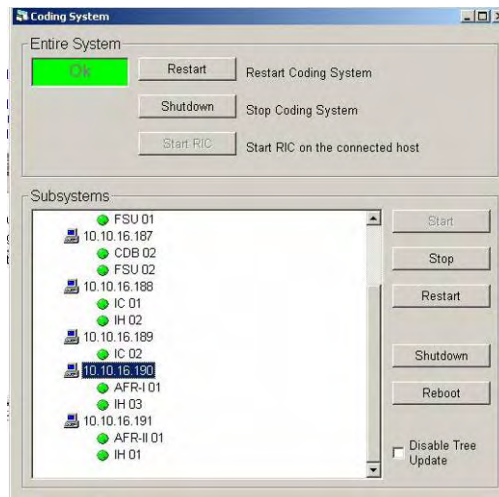


Figure 1-248. Start/Stop Window with System Selected

7. A "uicool" confirmation window is displayed with the message similar to, "Do you really want to execute 'Stop' on host xx.xx.xx.xx". (xx.xx.xx.xx = should be the IP address of system with wrong configuration). Click on **Yes** (Figure 1-249).

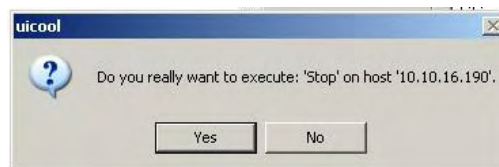


Figure 1-249. Execute Shutdown

After a few minutes, the selected computer will change status to “Not Ready” (Figure 1-250).

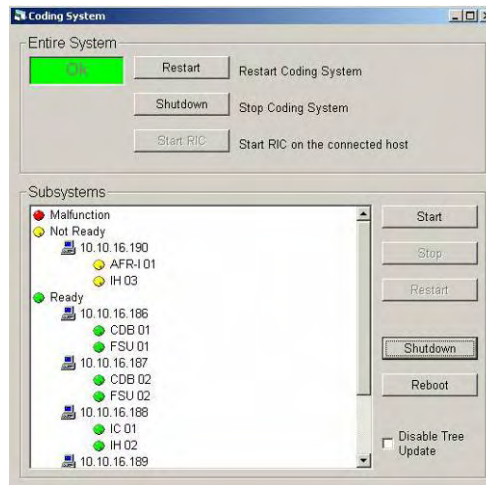


Figure 1-250. Status not Ready

8. Move to the selected computer.
9. If necessary, switch monitor and keyboard to the computer with the stopped IMS application.
10. Press the **Ctrl-Alt-Del** keys simultaneously. Ignore any error messages.
11. Click on **Log Off** to log off as user 'cool' (Figure 1-251).



Figure 1-251. Log Off

12. A “Log Off Windows” confirmation window is displayed (Figure 1-252).
13. Press and hold the **Shift** key and select **Log Off**.

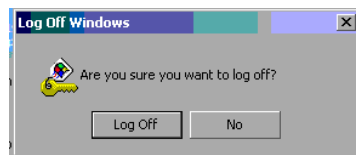


Figure 1-252. Confirm Log Off

14. Continue holding the **Shift** key until the “Log On to Windows” popup is displayed (Figure 1-253).
15. Ignore error messages popping up.

NOTE

You may need to click on the “End now” or “OK” button to close other running tasks.

16. Login as user **usps admin** and click **OK**.

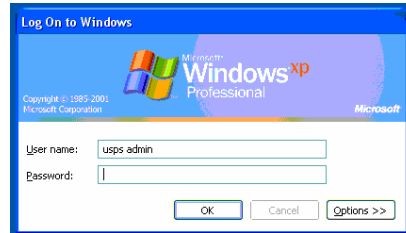


Figure 1-253. Login as 'usps admin'

17. Go back to the First RIC.
18. Select the First RIC in the “Start/Stop” frame and stop IMS application on First RIC.
19. Press the **Ctrl-Alt-Del** keys simultaneously. Ignore error messages.
20. Click on **Log Off** to log off as user 'cool' (Figure 1-254).



Figure 1-254. Log Off

21. A “Log Off Windows” confirmation window is displayed (Figure 1-255). Press and hold the **Shift** key and select **Log Off**.

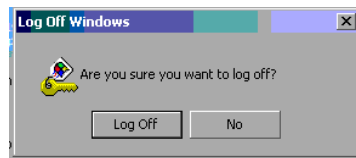


Figure 1-255. Confirm Log Off

22. Continue holding the **Shift** key until the “Log On to Windows” popup is displayed (Figure 1-256).
23. Ignore any error messages that may pop up.

NOTE

You may need to click on the “End now” or “OK” button to close other running tasks.

24. Log in as user **usps admin** and click **OK**.

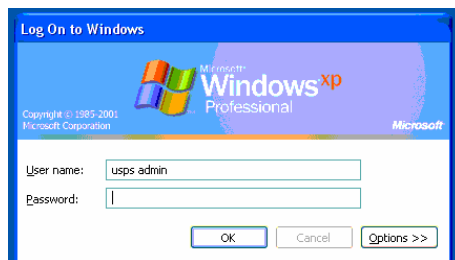


Figure 1-256. Login as 'usps admin'

25. Start Deploy Editor by double clicking the **Deployment Editor** icon on the desktop (Figure 1-257).



Figure 1-257. Deployment Editor Icon

26. The “Deploy Editor” window opens (Figure 1-258). Select the system in the “Configuration Items” frame to change the “Configuration Details” on the right side.
27. Click on **X** to close editor.

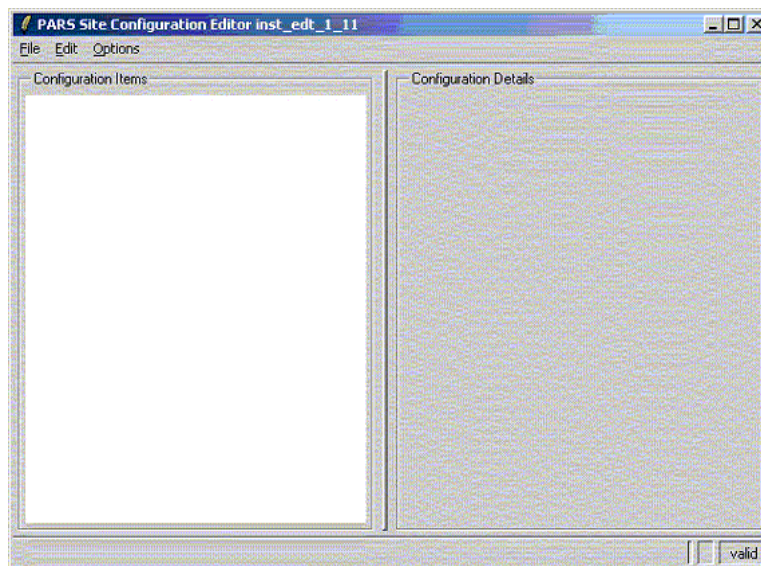


Figure 1-258. Deploy Editor

The “save changes?” window is displayed (Figure 1-259). Click on **Yes**.

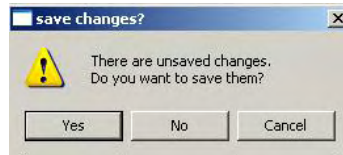


Figure 1-259. Save changes in Deploy Editor

28. Start “Installer User Interface” by double clicking on the **Install User Interface** icon on the desktop (Figure 1-260).



Figure 1-260. Installer User Interface Icon

29. The initial “Installer User Interface” window opens (Figure 1-261). Click on **Deploy** at the bottom of the right side.

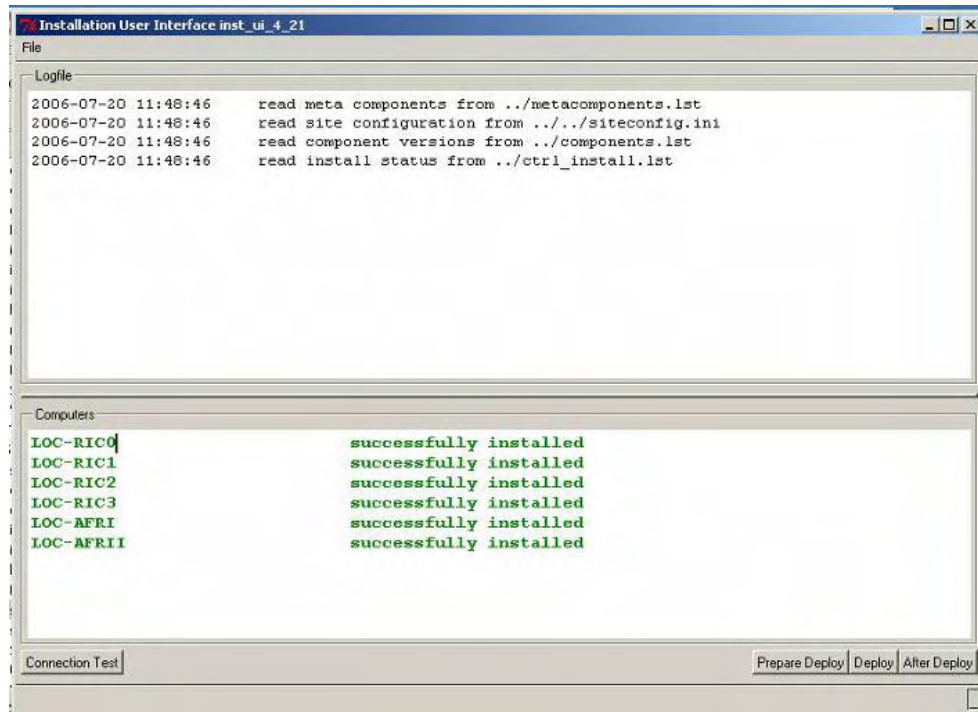


Figure 1-261. Installer UI

30. The status of the system with the changed configuration will change to uninstalled (Figure 1-262).

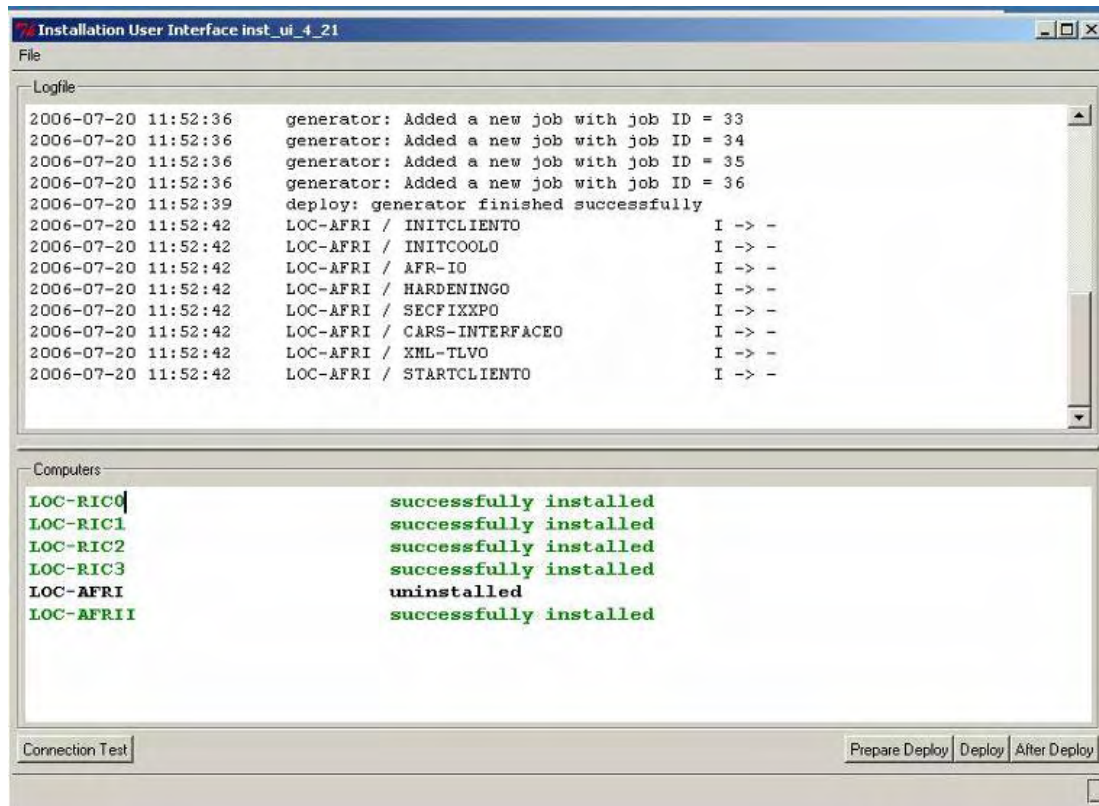


Figure 1-262. Uninstalled Status for Changed System

31. Wait until the status of the “STARTCLIENT” component changes from “P” to “I” in the “Logfile” section of the window. The status of the system with the wrong configuration remains in status “partly installed” (Figure 1-263).

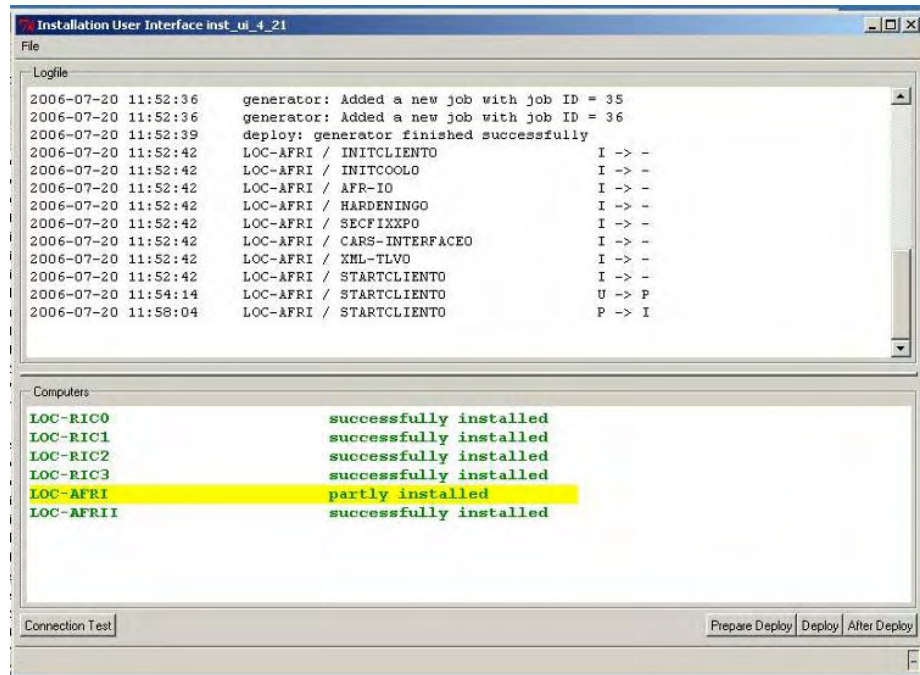


Figure 1-263. Deploy finished

32. Go to the system with the wrong configuration and perform a shutdown.
 33. Install a new OS and perform configuration as described in previous sections.
 34. After OS installation and configuration, return to the First RIC.
 35. Place the cursor in the highlighted line and press **R** key, the word “reinstall” is displayed in the same line (Figure 1-264).

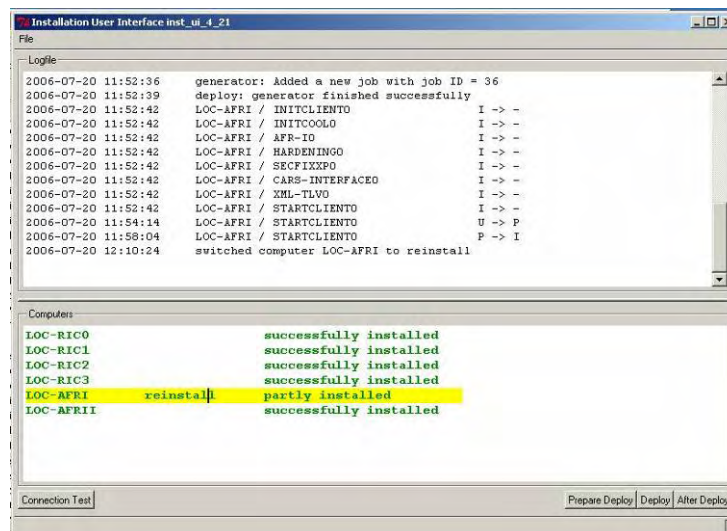


Figure 1-264. Reinstall System

36. Click on **Deploy** at the bottom of the right side. The status of the system with the changed configuration will change to “install in process”. When finished, status will change to “successfully installed” (Figure 1-265).
37. To remove the reinstall flag, place the cursor in the line of the reinstalled system. Press the **R** key and click on **Deploy** to remove the reinstall flag.
38. Close “Installer UI” window with left-click on **X** in upper right corner.

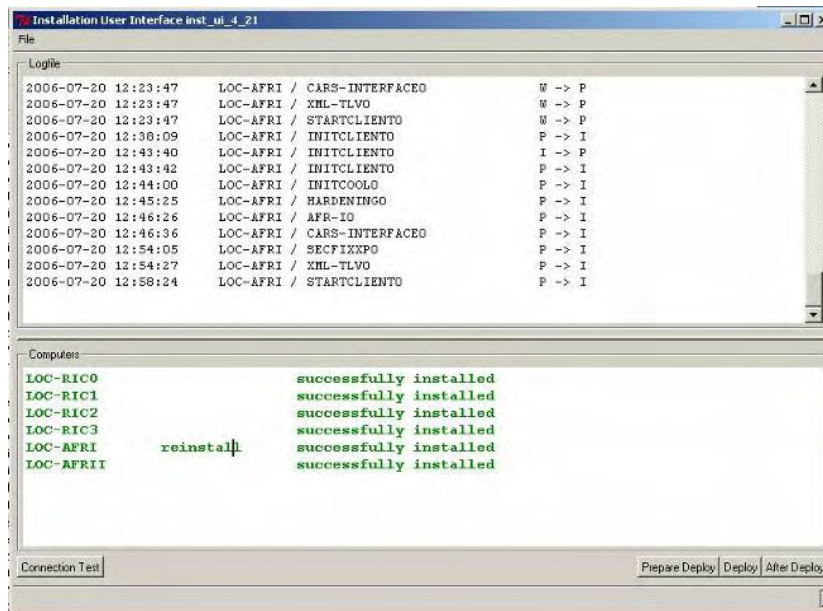


Figure 1-265. Successful Installed

39. Click on **Yes** when the “About to leave...” screen is displayed (Figure 1-266).

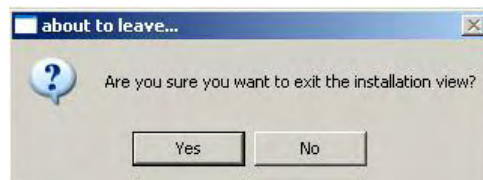


Figure 1-266. Exit Install UI

40. Edit the file **vcc_ids.cfg** as described in section 10.9.
41. Press the **Ctrl-Alt-Del** keys simultaneously. Ignore error messages.
42. Click on **Log Off** to log off as user 'usps admin' (Figure 1-267).



Figure 1-267. Log Off

43. A “Log Off Windows” confirmation window is displayed (Figure 1-268). Select **Log Off**.

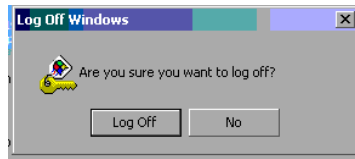


Figure 1-268. Confirm Log Off

44. The Logon window is displayed (Figure 1-269). Mark the **I agree** checkbox.

45. In the 'Enter Logon ID' field, type **SEC Technician**.

46. In the 'Enter your Password' field, type the appropriate password.

47. Click on **Logon**.

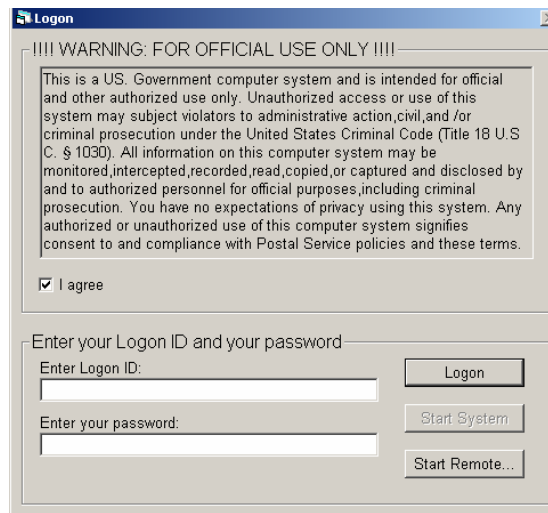


Figure 1-269. Logon Window

- 48. The 'Site Overview' window is displayed.
- 49. If not already opened, open the Site Overview frame by selecting **Control** and **Siteoverview** on the PARS Supervisor UI menu bar (Figure 1-270).
- 50. Verify that all systems are running in the System Status frame.

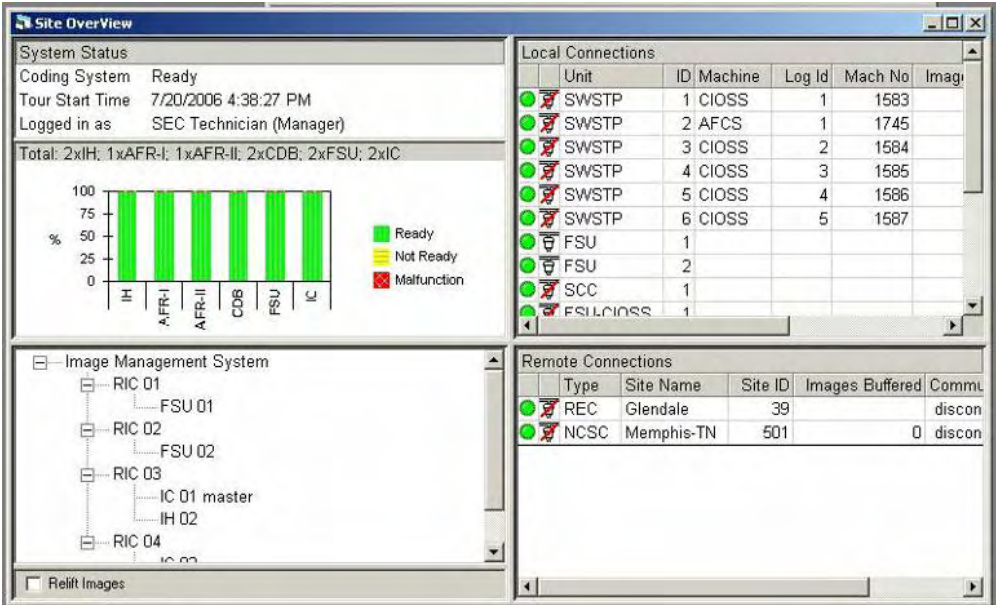


Figure 1-270. System Status Control

The reinstall is complete.

10.15.2. Possible Errors during Setup

During setup of the First RIC computer from media, the following errors have been observed.

Error codes not listed in Table 1-7 can be found on the web at:

http://www.appdeploy.com/faq/msi_errors/detail.asp.

Unless otherwise noted, try to execute **setup.exe** a second time by double clicking on it.

Table 1-7. Error Codes during Setup

Location	Error Code	Meaning	Trouble Shooting Hint
Setup from media	1500	Another installation is in progress. You must complete that installation before continuing this one	Try “Retry” if such a button is offered.
	2203	Cannot open database file	This may happen if Windows Installer attempts to copy the file to a directory but cannot, due to a permissions problem. This occurs most commonly when the SYSTEM user does not have permissions to the target folder. Possibly permissions for the C:\WINDOWS\Installer or C:\WINNT\Installer folder, the C:\TEMP or C:\WINDOWS\TEMP, and TEMP\Installer directories have been changed.

10.15.3. Status Summary of the Install UI

Each computer in the ‘Computers’ view of the Install UI is always in one the states listed in Table 1-8.

Table 1-8. Status Summary of Install UI

Install UI status text	Meaning
Successfully installed	All components are installed (component status ‘I’)
Error	One or more of the components is in error (component status ‘E’)
connection wait	The computer cannot be reached by the Controller Service
install in process	A component is currently being installed (component status ‘P’)
partly installed	One or more of the components are installed
new components encountered	There are components in target deployment state (siteconfig.ini) which have no counterpart in the actual deployment state (ctrl_install.lst).
uninstalled	There are components in target deployment state (siteconfig.ini) which have no counterpart in the actual deployment state (ctrl_install.lst).

10.15.4. Possible Error Codes in Install UI

When a component goes into error (X->E in the in the 'LogFile' view of the Install UI), there will be an error code displayed. The appropriate error code is given at the end of such an X->E line.

The error codes depend on the component being installed. The error 1 in component X is different from error 1 in component Y. Furthermore, the error might be issued by the Controller Server (e.g. computer to be installed has some global error) or by the Controller Client (e.g. component to be installed cannot be found at all; "no install.bat"). Hint: When many components go into error at once (several X->E lines displayed simultaneously in the 'LogFile' view) the error is issued by the Controller Server. The most important error codes are listed in Table 1-9.

Table 1-9. Install Error Codes

Location	Error Code	Meaning	Trouble Shooting Hint
Server Side (Controller Server)	5001	Ping to client failed	
	5002	Backup of old InitClient failed (xcopy failed)	Perhaps problem with Admin rights of Controller Server
	5003	Copy of new InitClient failed	Possibly different administrator login/password on First RIC computer and client (both should have an 'usps admin' account)
	5004	Cfg_srv.exe not running (cannot be started)	
	5005	Process cannot be started on Client (psexec)	
	5006	Cfg_srv.exe cannot be started (fstart.bat)	
	5007	Cannot copy bootstrapping files (like cfg_load.exe) to client (fstart.bat)	See log file inst_update_<ip address of client>.log for details.
	5008	Local call of fi_load.bat failed (fstart.bat)	
	5009	Remote call of fi_load.bat failed (fstart.bat)	
	5112	Timeout of the Controller Server initiated process which starts(update) installation on client (ClientInstall.bat or fstart.bat)	
	5998	Error creating process ClientInstall.bat (see above 5112)	
	5999	Error creating process fstart.bat (see above 5112)	

Location	Error Code	Meaning	Trouble Shooting Hint
Client Side (Controller Client)	3	File to be executed not found (e.g. no install.bat)	
	112	Timeout of a Setup being installed	
Client Load (fi_load.bat, cfg_load)	21	Could not write to file C:\install_pers\fi_load.log	
	22	Remove.ord file not downloaded by cfg_load	
	23	Cfg_load -s setup failed	
	24	Could not copy fi_load.bat as Afterremove's install.bat program	
	25	Could not write to file c:\install_tools\setup.ord	
	26	Could not copy remove.ord	
	27	c:\install_tools\request.tim not writable	
InitClient Setup	11	Ping to First RIC computer failed	
	12	Current computername does not match the siteconfig.ini defined name.	Typically the COMPUTERNAME is wrong.
	13	Setup itself failed	
	14	Config Load cfg_load failed	
	15	Creation of user "cool" and cool-env failed.	
MSI Error (from within Client Installation)	1326	Error getting file security.	Might be related to insufficient permissions
Prepare Deploy			
	003	FiLoad.bat cannot be copied no access to \cool\setups\InitClient or directory did not exist	Verify access to \cool\setups\InitClient or if the directory exists
	101	Controller client or server not started	Start controller server manually or reboot

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10.16. NEW INSTALLATION OF IMS

As a new IMS 4.0.1 installation is done by Siemens Field Service, there is no detailed description.

For a new installation:

- Take a site configuration list instead a printout of the siteconfig.ini file for system and IMS configuration.
- No backup and restore is necessary. DataSave/Restore scripts are not required to be installed.
- IPCollection - and AutoConfiguration scripts can not be used. The systems must be configured manually after OS installation.
- Symantec Ghost can be used for drive cloning.

11. POST-INSTALLATION VERIFICATION PROCEDURES

The post-installation verification cross checks the system to verify its functionality and consists of three main steps:

- Formal installation verification
- Functional verification of the local site
- Functional verification in the context of other sites, e.g. P&DC to REC connections

NOTE

If you install this software load after May 14th, 2007 verify that the IMS 4.0.2 66.6015.236-00.ODT IMS 4.0.2 Rate Change “copy from floppy” utilities and new configuration files are installed.

11.1. FORMAL INSTALLATION VERIFICATION

The formal installation verification is the first step of the post-installation verification process to ensure proper system configuration by verifying the entries of the file siteconfig.ini match the confirmed deployment.

During installation, the Install UI provides the confirmed deployment view of the entire site and can be used at any time to verify the formal installation. No actions have to be taken at this point.

After installation and start up of the system, the IMS Supervisor UI provides the version identifiers. An appropriate user can choose **Help** and **Versions** on the menu bar.

- The IMS version should be 4.0.1
- All subsystem versions should be 4.0.1

11.2. FUNCTIONAL VERIFICATION LOCAL SITE

1. Select **Control** and **Address Dictionary** on the Supervisor UI menu bar.
2. Verify in the **Dictionaries** window that following dictionaries are available:
 - Mcl
 - para_adr
 - stamp
 - umf
 - xai2
 - cix
3. Verify that from each dictionary, one version is activated (green bullet). The versions shown in figure Figure 1-271 are examples. If not, click on the desired version to highlight it. Then click on **Select** button to activate.

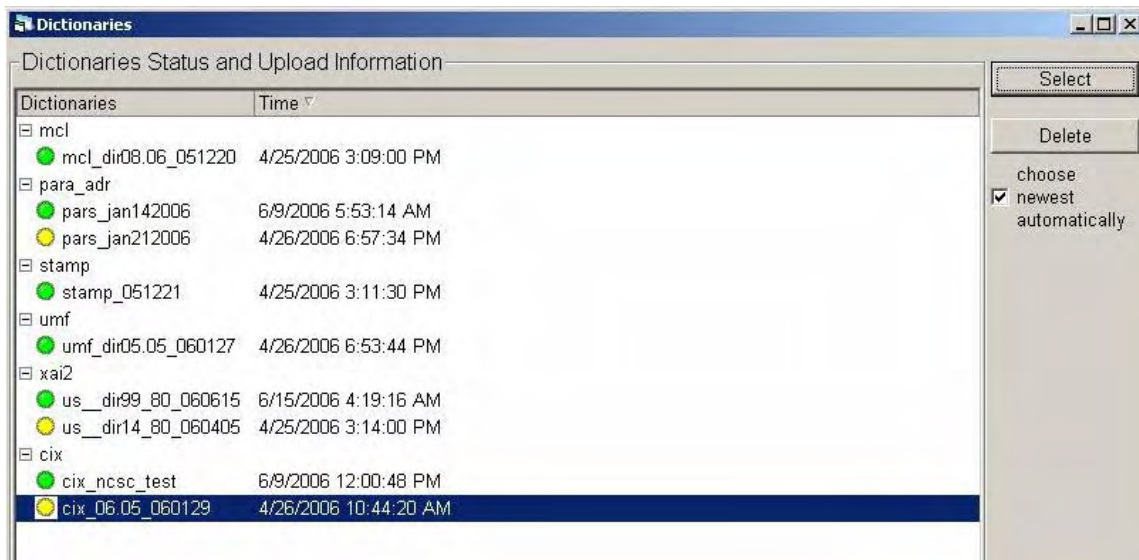


Figure 1-271. IMS "Dictionaries" view

1. Verify the function **choose newest automatically** is activated (box checked). If not, check the box to activate the function.
2. For a P&DC site, an appropriate user can check the system state by choosing **System** and **Start/Stop** on the Supervisor UI menu bar.

This will pop up the Coding System frame, indicating the current state of all IMS Subsystems in the P&DC site.

11.3. FUNCTIONAL VERIFICATION SITE TO SITE

For a P&DC site, an appropriate user can check local and remote connections.

The “Site Overview” frame in Figure 1-272 indicates:

- The local IMS configuration, i.e. the IMS computers and their assigned subsystems.
- The Local Connections configured, i.e. SWSTPs, FSU, CARS, CIOSS, SCC
- The Remote Connections configured
- Logon information of the current UI user
- Time stamp when the current tour was started

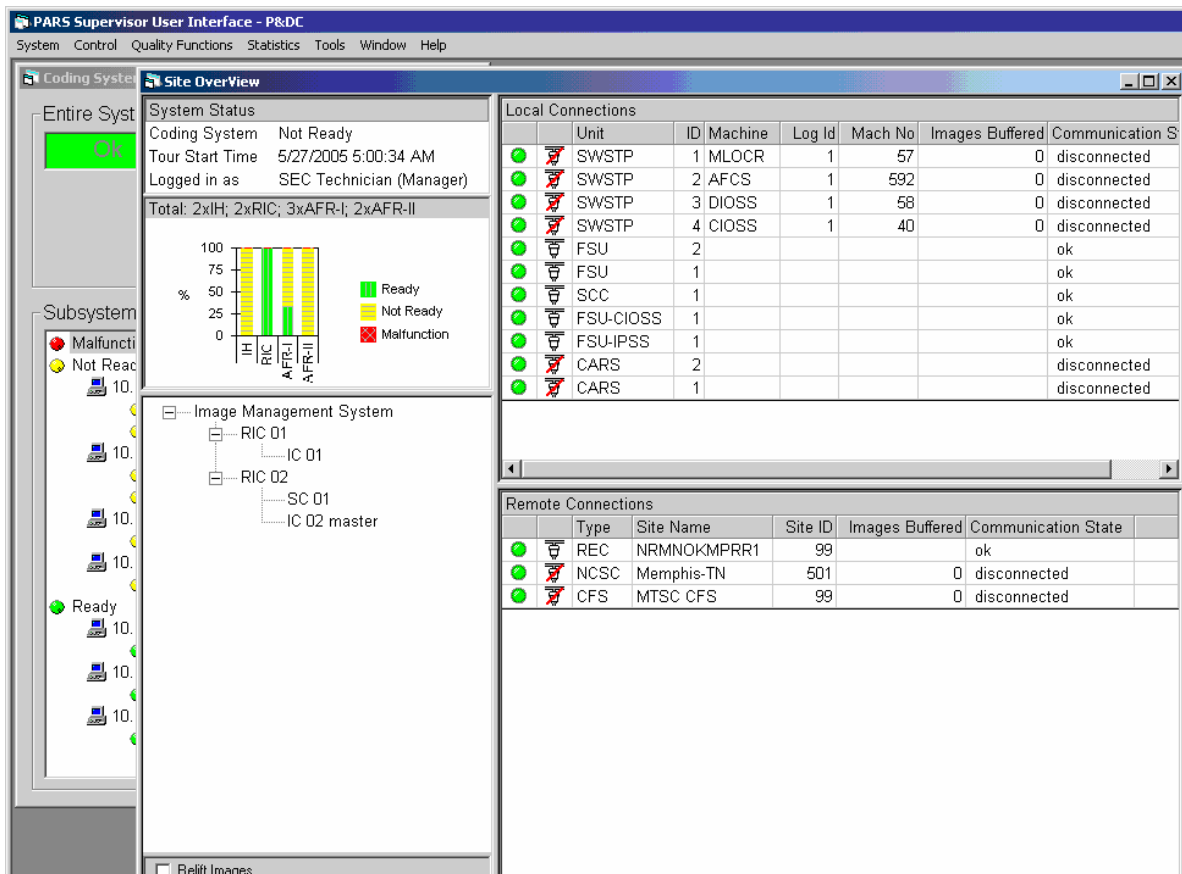


Figure 1-272. Supervisor UI Showing Site Overview

12. CATASTROPHIC RECOVERY PROCEDURES

This section describes the procedure of the rollback from IMS 4.0.1 back to IMS 3.0.

The installation of IMS 4.0.1 requires the migration to a new operating system (Windows XP). IMS 4.0.1 is an initial installation, therefore restoring to the previous state (IMS 3.0) can only be done by a new installation of Windows 2000 Professional and IMS 3.0.

12.1. DEPENDENCIES

In case of a rollback from IMS 4.0.1 to IMS 3.0, all P&DCs assigned to a REC site must rollback first. Keying images from IMS 4.0.1 P&DCs in an IMS 3 REC site will cause wrong results.

12.2. OPERATIONS IMPACT

The focus of a catastrophic recovery or rollback is to return the system to an operational state.

Therefore:

- Additional hardware deployed during the upgrade from IMS 3.0 to IMS 4.0.1 or later will not be supported after the rollback to IMS 3.0 to avoid a configuration that is not supported in IMS 3.0.
- Operational data from IMS 4.0.1 will not be restored. Operator data must be added manually. It is not applicable to restore data that was saved weeks ago in IMS 3.0. This might lead to an unusable system.

12.3. DOCUMENTS AND MEDIA

12.3.1. Additional Documents for Recovery

Document Id	Document Title (Filename)	Version
516-14195	PARS_SVD_IMS300_PDC_UPGRADE	10
516-14226	PARS_SVD_IMS300_ADD_PDC_IIRC	2
516-14224	PARS_SVD_IMS300_ADD_PDC_ISR	2
USPS MMO-111-06	USPS MMO AFCS.lst Update	1
516-14324	PARS_SVD_RicNewRates2006_GracePeriod	3
516-14325	PARS_SVD_RicNewRates2006_POSTGracePeriod	3

12.3.2. Additional Media for Recovery

Media P/N	Title
600-2557-001ODT	"RIC OS" for RIC/AFR computers (Windows 2000) CD #1
600-2557-002ODT	"RIC OS" for RIC/AFR computers (Windows 2000) CD #2
600-2553-000ODT	IMS 3.0.0 PARS SOFTWARE AFR/IMS INSTALLATION KIT
600-2670-000ODT Rev. 5	PARS SOFTWARE IMS REC/P&DC INITIAL DICTIONARIES DVD
66.6015.181-00.ODT Rev 1	PARS IMS P&DC AFCS LIST UPDATE INSTALLER
600-2799-000ODT Rev. 1	PARS IMS Software Install Media for RIC New Rates 2006 Grace Period Update 1
600-2800-000ODT Rev. 1	PARS IMS Software Install Media for RIC New Rates 2006 Post Grace Period Update 1
600-2762-000ODT	Prepare Deploy Tool CD, Version 1.0.0

12.4. RECOVERY OVERVIEW

The whole recovery procedure consists of:

- Stop IMS 4.0.1, including RPDS
- Installing Windows 2000 Professional on all IMS 3.0 computers
- Install IMS 3.0
- Install Patches for IMS 3.0
- Verify IMS 3.0 Installation

The whole process will take approximately 16 hours for a P&DC with 12 AFR readers (total sum of AFR-I + AFR-II). Add 1 hour for each 2 additional AFR readers. Read the entire installation instructions before attempting the installation.

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12.5. PRE-RECOVERY INSTRUCTIONS**12.5.1. Recovery Checklist**

Use the following list during installation to note your remarks:

Description	Y/N	Remarks
Pre-Recovery issues		
Administrator account name and password		
Installation devices available Floppy drive, CD/DVD drive (USB)		
PARS IMS release (OS Images, IMS software, dictionaries)		
Drive Duplicator computer and Ghost Boot Disks for drive duplicator		
No Images in IMS system		
Performed Tour Change		
2 hours before Rollback disconnect STP		
Site configuration list of previous IMS 3.0 backed up before upgrading to IMS 4.0.1 (siteconfig.ini) at hand		
Site installation issues		
Drive Duplicator setup and connected to LAN		
RICs, AFRs and SUI installed with Windows 2000 Prof.		
RIC 1 IMS 3 Setup performed		
Site Configuration verified for IMS 3.0 (via Deployment Editor)		
First RIC computer successfully deployed with IMS 3.0.0.		
PARS IMS clients (RICs, AFRs , and Supervisor UI) successfully deployed		
Initial IMS start performed		
AFCS list rev. 2 Patch installed		
New Rate changes Grace Period Patch installed		
New Rate changes Post Grace Period Patch installed		
Verification issues		
UI available on all hosts where configured		
Start/Stop frame indicates all hosts ready		

12.5.2. Pre-requisites for Recovery

- Media as listed under materials released in section 12.3.2
- Plextor or Iomega CD/DVD reader for USB connection
- USB floppy drive
- Password for the "SEC Technician" IMS account and 'usps admin' windows account

- Print out of last SiteConfig.Ini from previous IMS 3.0 installation
- Backup copy of last SiteConfig.Ini from previous IMS 3.0 installation
- Printout of all documents referenced in section 12.3.1
- No images are stored in the IMS system, all images are lost. There is no backward compatibility from IMS 4.0.1 to IMS 3.0.
- Tour change is done right before rollback starts.
- STP is disconnected at least two hours before upgrade.

NOTE

P&DC sites formerly equipped with three RIC servers and upgraded to four RIC servers during upgrade from IMS 3.0 to IMS 4.0.1 are now downgraded back to three RIC servers.

12.5.3. Recovery Procedure

Clear the IMS before Rollback and stop IMS 4.0.1.

All operational data from IMS 4.0.1 is lost after the rollback to IMS 3.0. Therefore, IMS should be emptied before rollback.

It is recommended for the P&DC to schedule the following measures prior to the rollback maintenance window:

1. Stop Image Lifting in PARS mode early enough and disable the SWSTP and SCC connection so there is a chance to finalize the images already in the IMS.
2. Stop COA form scanning in the CFS sites assigned, if any.
3. The REC site assigned to the P&DC should be prepared to key all images as far as possible. Select **UI Statistics** and **REC Statistics** to verify the counter "Processing" is 0.
4. Finally, the P&DC should label all outstanding mailpieces as far as possible. To check the amount of images still in the IMS, select **UI Statistics** and **Image Storage**. In the Image Storage Statistics window, the "IH id" must be set to **Total**. Look for the counter by selecting **Images** and **Stored**.
5. Write down operators, if there are some created beside Sec Technician.
6. Perform a Tour change.
7. Shutdown IMS 4.0.1 from the Start/Stop frame by selecting **System** and **Start/Stop** on the PARS Supervisor UI menu bar:

Setup the P&DC site with IMS 3.0

Install Windows 2000 Professional and IMS 3.0 software:

PN# 516-14226 PARS_SVD_IMS300_ADD_PDC_IIRC and
PN# 516-14224 PARS_SVD_IMS300_ADD_PDC_ISR

8. Install Windows 2000 Professional on First RIC.
9. Setup IMS 3.0 on the First RIC.
10. Copy Dictionaries on the First RIC.

11. Restore Siteconfig.ini of previous IMS 3.0 installation.
12. Install Windows 2000 Professional on remaining RICs.
13. Install Windows 2000 Professional on AFRs and Supervisor Terminal.
14. Deploy IMS 3.0 on the First RIC.
15. Deploy IMS 3.0 on the remaining IMS 3.0 computers.
16. Verify IMS 3.0 Installation.

12.5.3.1 AFCS list Rev. 2 patch

For details, refer to MMO-111-06, "Loading Updated AFCS Machine Number File for PARS IMS Versions 3.0.2 (build 31.30) and 4.0 (build 32.39)".

12.5.3.2 Install New Rate Changes Grace Period patch

For details see PN# 516-14324 PARS _SVD_RicNewRates2006_GracePeriod.

12.5.3.3 Install New Rate Changes Post Grace Period patch

For details see PN# 516-14325 PARS _SVD_RicNewRates2006_POSTGracePeriod.

12.5.3.4 Finalize IMS 3.0 installation

1. Perform a tour change.
2. Add needed operators manually to operator database.

Rollback from IMS 4.0.1 to IMS 3.0 is finished now.

13. RELEASE NOTES

13.1. ECRS

This section summarizes all ECRs provided with this release.

EC7335: 9 DIGIT KEYING FOR RTS MODE

In those cases where a 9-digit ZIP code is needed, the keyers at the REC site will need to key inward to obtain the 9-digit ZIP. The worst-case scenario is that a keyer may need to key an additional 35 keystrokes to obtain the same result as what could have been accomplished by hitting the ZIP + 4 Key with the required add-on digits (five keystrokes).

Solution: The ZIP+4 numbers in a sender address will get preference above the written address. Access to the corresponding directory data is given with a different access key. The appropriate directory generation is available with EC7336.

RTS ZIP + 4 keying mode is adapted to be IPSS compliant.

IPT retest issue: the VDT will code NAZ addresses to 11 digits only if a HCN is requested. If not, the VDT will stop after 5 or 9 digits. The changes affect the Sender Combined coding mode.

EC7336: DBL DOWNLOADED FROM NDSS SERVER TO AIV SERVER AT REC

DBL will move to NDSS at San Mateo. A directory download mechanism is configured. For the migration phase until DBL is available at NDSS, it is ensured that the distribution path from CARS is still working. DBL download at the REC is provided for the AIV. IMS 4.0.1 will use only the new "dbl2".

CFR-I to use NDSS generated DBL; CFR-II to use NDSS generated directories.

EC7338: INDIVIDUALS SHALL NOT REDIRECT BUSINESS MAIL

The change provides the ability to ascertain whether an address is a business address or an individual address. It disallows any individual change of address orders to occur from a business address. This ECR is only applicable to CFPS. The VCD CFPS Name desk will reject any individual or family COA form if the old address is a business address.

EC7557: PROVIDE SITE ID FOR ACS AND 3547 NOTIFICATION

The site id is set in the previously unused Operator-ID field of the ACS record. The interface to the NCSC mainframe is modified to make this information accessible.

EC7587: ONE CODE ACS

A fully automated ACS notification system is introduced that does not need any manual handling anymore. A new mailer endorsement Electronic Service Requested (ESR) is supplied.

A 4-state barcode or PLANET barcode located above the address block is used to identify the ACS Participant ID (PID), which allows accessing the corresponding Universal Mailer File (UMF) record to derive the mail class and ACS service. Any mail class derived from the mail piece is overridden by the UMF record content. A POSTNET barcode below the address block is used to provide address information to the ACS participant.

The barcode reading results from the WFOV camera will be used as preknowledge and provided to the AFR. The SWSTP will send the barcode reading results to the RIC.

The VCD will support coding of the new endorsement.

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One Code ACS notifications will be considered as normal ACS in all ACS related counters. In Endorsement Rates Statistic, the Resolved Electronic counter is added.

IPT retest issue: USPS requested using given ACS service codes Excel file for considering the correct Special Service Codes. Only the Service Codes, that are mapped to address service, change service or return service, will generate pid, key, and endorsement information based on the barcode.

The RIC shall also honor OneCodeACS in cases where no endorsement is printed on the mailpiece. In these cases, RIC creates an ACS, depending on endorsement derived from AFR analysis of barcode

EC7588: PARS LABEL RECOGNITION TASK INDICATORS

The PARS label provides various information about how and where the image was processed. The first (top) line of the label is changed to provide Recognition Task Indicators in a hexadecimal format that identifies which task was performed by the AFR.

EC7591: PRINT NO ENDORSEMENT NOTIFICATION

In any labeling process where ACS data is detected, but no endorsement is found (such as the case of printing the endorsement in reverse video), a 3547-type image is created and sent to NCSC for notice to the mailer of printing deficiency and possible address correction. This type of record is flagged as a "no endorsement" record type.

A 3547 notification is generated with a string "No Endorsement" above the old address.

At the P&DC, the "No Endorsement notifications" are considered as normal 3547 notifications in the statistics. Processing Summary 1 is adapted accordingly.

EC7631: PARS RETURN TO SENDER KEYING - ALL MODES

USPS required that the return address and the delivery address in several keying tasks should, in general, not be equal.

The existing check in the VCD, whether the delivery address and the sender address are equal, is removed. The check will be done by RIC. In case of identical receiver and sender address, an item is now sent to CFS Processing. In particular, if delivery address is to be keyed and delivery address matches the return address, the item is sent to CFS processing.

IPT retest issue: wrong CFS processing is fixed. For RTS mail, empty delivery and return addresses are no longer considered as equal. With this fix, they are no longer sent erroneously to CFS processing.

EC7632: CFPS DATE VALIDATION

During the months of December and January, it is now assumed that a COA with a begin date of January of the previous year is incorrect and January of the new year is substituted for the start date (instead of not returning a start date at all).

During months December and January, the VCD and RE frame will accept a date in the previous January and will correct the year to the next one. CFR-I will not be changed (as opposed to CFRII). In this case, dates in previous January will have to be coded at least once at the VCD.

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EC7649: CFPS - CANCEL COA FLAG

The new PS form 3546x has two reasons to cancel a COA listed. A new flag is added to the delete record. The flag indicates when a COA is cancelled because of an invalid request (non boxholder, cmra, central delivery point, military address, etc.). The change is also implemented in NCSC coding strategy.

IPT retest issue: fixes to avoid unnecessary keying if the action type is DELETE (INVALID), or DELETE (RESUME).

Single delete action requested:

The action type is either "Cancel COA Order; Invalid Request" or "Cancel COA Order; Resume Delivery".

If action type is confirmed by both CFRs, no prompt for Alt. Extract is performed at VDT. If the action type is not confirmed (mismatch between CFR1 and CFR2), it is required to prompt for Alt. Extract, otherwise we could miss information that is required to capture Multiple actions requested, including a delete action.

If multiple checkboxes for actions requested are marked, there is low confidence due to the small checkboxes.

In case finalization through automated processing (CFRs) is not possible: at least one operator input is required to finalize the action type selection since action type is not confirmed, it is required to prompt for Alt. Extract, otherwise we could miss information.

The full information is keyed if multiple action types are selected because all information shall be provided to KFP.

EC7672: CHANGES TO REC EDIT TOOL

Trainers requested changes to the PARS edit functions: Information on keyer name is to be added. Information on what the keyer prompt was for (e.g. carrier confirmed or intercept) is also to be added.

Solution: Manual EDIT and Auto EDIT result dialogs are extended to add the keyer name to printed images and to printed reports. For name keying the lift mode will be indicated and for address keying error images will be shown that indicate the kind of address.

EC7697: ICOA REJECTS

Rejected iCOA will be sent to the Scanning CFPS site (and no longer to the NCSC). If a rejected iCOA is rejected again on the KFP desk then the iCOA is sent to NCSC. The reject information is provided as today.

EC7723: PROVIDING KEYING RESULTS TO EACH VDT FOR REVIEW

USPS required to setup VDTs in a way that there is a UI running in parallel which can be used for a keyer to review his/her training results without the need to travel back and forth between the supervisor VDT and the training VDT.

Solution: The VCD will provide an additional screen for reviewing the results of the current training session. The images and results will be stored locally and will be kept until the operator logs out completely (i.e. later reviewing of the results will be only possible on the Supervisor UI). This is a pure VCD solution; no other systems are affected

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EC8062: IMAGE LIFT CAPABILITY ON A DBCS/DIOSS

A DBCS/DIOSS image lift mode which resembles CIOSS image lift mode is provided. It may be used if the CIOSS was in the label mode or was down for maintenance. It is possible to lift images, spray ID Tags, spray 3 digit alpha character RTS identifier, read RTS separator cards, and sort as a CIOSS does.

IMS UI is extended to show DBCS machines as Image Lift Units. RIC Coding Strategy is extended to support DBCS cUAA image lift mode on DIOSS and online DBCS

EC8070: REPORT ON THE NUMBER OF FORMS BY CARRIER ROUTE

Ability to count and print report on the number of forms by carrier route is provided. The PARS CIOSS software is expanded to provide statistical counts for number of intercepts and carrier-confirmed mail pieces based on old and new CRID. PARS passes this information to IDS after every end of run.

EC8079: ALL PARS WAN SYSTEMS TO USE DNS IP ALIAS NAMES WITHIN THE MNS+ NETWORK

All PARS systems contain a network configuration that contains its HOSTNAME as the USPS supplied unique PARS Alias name. CI, IC and the UI will use these IP alias names. CI and the UI will use alias name resolution from file (instead of DNS) in case of a communication problem.

NOTE

For information on configuration, using DNS or ALIAS NAMES, contact: Maintenance Technical Support Center (MTSC) at 1-800-366-4123

IPT retest issue: the ci is fixed to not overwrite (new resolved IP from other CI in ci_alias.cfg values on config server with loaded values

EC8087: preliminary step: Connection View on Supervisor UI

As a preliminary step to EC8087 the capability to detect and locate network problems is improved:

1. Detect communication problems, report to IC (from where to where), display in UI. Monitor not only unsent messages (100) but use also timeout (1 min) to avoid SHM overload with less than 100 messages.
2. Detect duplicate master, report to IC, display in UI (recommend system restart)

IPT retest issue: the network problem diagnostic window has been improved:

The window title has been changed to "Communication problems detected starting at <time>" and the error pop-up has been removed.

EC8100: IMS support for RPDS interface

The new Remote Performance Diagnostic Server will supply diagnostics for Mailpieces and COA-Forms as well as for No Record Analysis. IMS 4.0.1 provides a new interface to supply RPDS with the required data via a CI connection.

EC8203: Display no new address for COPI records in CQ and result logs

The CQ tool is to conceal new address information when it is a COPI record. However, when entered as a combination of both MILITARY and COPI, the new address information is exposed. The CQ tool as such behaves properly, but CARS does not properly handle the combination of MILITARY and COPI flag, this will be fixed in the next release of CARS. The problem is captured by PT#37166.

EC8421: New Rates for 2007

New rates will be effective May 14, 2007. New rates can be found at <http://www.usps.com/ratecase/>. The Board of Governors have delayed implementation of the Periodicals changes until July 15, 2007. An update is provided for the label dictionary, DLL, mail class dictionary and the stamp database.

ECP204: ATT_A 3.8: Storage of 45 statistic soft copies

The reports are currently stored for 30 days as a soft copy. This period will be extended to 45 days.

13.2. CHANGE REQUESTS

This section summarizes all change requests provided with this release.

XP Port Installer, Hardening and IMS-PORT

XP-Port consists of:

- PARS Installer to XP (SP2 + current fixes (if necessary)).
- XP-Hardening package
- IMS Port

Unbundling FSU

The deployment of the FSUs and ICs on the P&DC sites is changed to avoid the sharing of critical resources. There will be maximum 2 FSUs, located on separate RICs connected to the existing ICs. Master IC decides which FSU connects to CIOSS and SCC. On startup, the master IC resends all results to all FSUs. New results will be sent by every IC to every available FSU.

Up to now only computers with an IC were displayed as RIC in Image Management System view of the UI. Now it is possible to configure what will be displayed as RIC. This allows that computers with FSU but no IC will also be displayed as RIC.

Components shown at the Supervisor UI in the Site Overview window are now displayed in sorted order.

The RIC application in the Start/Stop dialog is now named IC to avoid confusion with the naming of the RIC computer (boxes).

Automated Data Save for installation to reduce keystrokes

An automated data save and restore of the data is provided to be used during an "Initial Installation" as it is needed for the XP-Migration. A initial installation of IMS 4.0.1 as a successor to IMS 3.0.0. is provided.

QF DB fill level display (2 Gb limit problem)

A DB fill level display to the Quality functions views to visualize the current state of the QF databases is provided. Available Quality functions: Manual Edit / Automatic Edit / CTS.

IPT retest issue: the visualization delay has been shortened. Temporarily, the fill level increases after deletion due to DB transaction logs getting written, then the fill level decreases.

Integrate Prepare Deploy Tool into Installation Environment

Prepare Deploy Tool is integrated into the Installation Environment

MS Security Patches: Install list of IMS 4 security patches agreed with USPS on 08/16/2005

The following patches are installed: KB890175, KB888302, KB890047, KB867282, KB890923, KB898458, KB901214, KB903235.

AFR support for VA Xanadu test decks

Xanadu VA IMS version comparison was tested successfully. No problems occurred with this testdeck.

DBL support for ZIPMove functionality on street extraction

The ZIPMOVE loadable is used for street extraction keying to handle cases where zone re-alignment has moved the street into a different finance number. Example provided by USPS is for 21401 in Annapolis, which is translated to 21409.

Enhancements for AFR Statistics Finalization rates

Due to experiences from IMS 3.0.0 Arbitration work, the following changes/enhancements to AFR Statistics are implemented:

AFR finalization rates are shown at the Supervisor UI separately for:

- Carrier Identified Forward Mail
- Carrier Identified Return To Sender Mail
- Interception Mail
- New Changes for IPT 3

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13.3. PROBLEM REPORTS AND OTHER CHANGES

This section describes all fixed problem reports and all other improvements provided with this release.

Adjust the forwarding period for moves from General Delivery addresses

Forwarding periods for moves from General Delivery addresses now depend on the type of the address: city delivery offices or non-city delivery offices (the so called small stations).

IPT retest issue: VDT sets addresstype to "N" for Non-City General Delivery and generates a Primary extract AAAA999.

Treat all RTS UBBM as 1st class

According to a USPS change request, carrier identified forward and RTS mail that is UBBM shall be treated as 1st class mail.

The carrier is not supposed to provide UBBM mail to the P&DC, so if UBBM mail is returned, the UBBM identification may be wrong. Hence, this measure reduces waste errors.

Some RTS decision paths in IMS 3.0 have not correctly handled that request, therefore, the Coding Strategy was reviewed and the wrong handling was fixed for IMS 4.0.1.

Provide FCS update time to local CARS update

When COA images are forwarded through NCSC for non-local CARS update, it happens that the timestamp for the local update is newer than the timestamp for the daily update, which causes problems to CARS.

The RIC now provides the timestamp the final CFPS result is returned from COA Server for ICOAs and scanned COA forms and the time stamp the image was received for COA Forms processed at Key-From_Paper-Desk to CARS.

9998 Add-On for all postage due mail

In some cases the RIC generates labels with a fee due that have a DPC, which does not end with 9998-99. Whenever a fee is due the postmaster has to collect it. Hence, the item needs to be addressed to the postmaster. A fee should be raised for non-official order.

Now, both official order and not official order will get a fee label and therefore will get a postmaster label barcode.

AFR usage of umf keyline information

The reader (AFR) provides for some test images a keyline with 13 digits. PFR should provide the full length of the keyline.

Solution: The handling of the ACS keyline task will no longer rely on the keyline length, which can be found in the UMF, i.e. when the keyline length does not match what the reader interprets the reader may provide a low credibility but provide the result derived.

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Keyer login time longer than actual login time

Change in response to complaints that operators have shown to be logged in to RCDs, long after they've left.

Solution: Logout is now also handled asynchronously.

Explanation: Login request was processed asynchronously while logout was processed synchronously. The former synchronous login in combination with an asynchronous logout and a queue jam could have caused that the logout was processed before the corresponding login request. This would have caused the login time to continue to count, although keyer was logged out.

AIV restarts on DBL overflow

When prompted for an apartment number, the AIV task restarts itself (example: 13603 Marina Pointe Dr. Marina Del Rey, CA 90292 (this is an apartment complex))

Solution: The AIV is configured to restart only after either 5 consecutive exceptions or 10 total exceptions. This matches the exception parameter settings on CFR and on CARS.

PENDING ECOA not showing in COARS

For a pending COA record, the original transaction id that points to the colliding record and the modified transaction-id is now provided to COARS to link the pending record to the existing record. The COA Server provides this information with the FCS QUERY Result, and RIC now processes this information for a pending record.

CFPS images with empty CFPS_RES tag at NCSC

In the case that a CFR-I returned an invalid result, a CFPS result with status "processed" but without a COA record was returned to the P&DC; the P&DC sent the image to NCSC without further processing (lookups).

Solution: The RCD frame was modified in order not to return CFPS results for invalid coding results from CFR to the P&DC, but to forward them for further coding.

Improve AFR timeout handling to reduce restarts

Improve timeouts caused by the extended analysis of sender and receiver address.

Solution: cross check the remaining AFR analysis time to return a partially resolved image before the AFR runs into the timeout. That way the AFR will not be restarted.

USP_20051126_0937: Alpha Numerics keyed with space drops alpha characters

The following bug is fixed: Alpha characters in alphanumeric primary numbers were dropped, e.g.

137A CISTUS PLZ;MONROE TWP, NJ 08831-3808-37 appeared in PARS as
137 CISTUS PLZ;MONROE TWP, NJ 08831-3808-37

Distribution of cfs_sites.cfg to COA Server

Change approved by USPS on 2005-10-14 at IMS 4 CDR: The cfs_sites.cfg file will be distributed together with the CIX file. In addition, the RPDS Alias Name is added as additional Parameter to a CFS site configuration.

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Garbage 4-state-barcode information from transports

When mailpieces bearing a 4 state barcode for One Code ACS mail are lifted from CIOSS, the barcode information is transferred as garbage data to the SWSTP. Garbage information is not recorded in log files. There is no negative impact on IMS/AFR read rates for One Code ACS (Endorsement, Participant ID, Keyline) since the WFOV-Preknowledge of the 4-state-Barcode is not used by AFR, AFR itself locates and decodes the barcode again. To be fixed with newer release of transports, captured by PT #37777.

Scheduled Automatic Edit

Scheduling of Automatic Edit Sessions does not work correctly:

Even if an Automatic Edit Sessions is created for daily or weekly activation, nevertheless it is activated only once.

Automatic Edit Sessions that are scheduled with a begin and an end time (irrespective of the activation property: once, daily or weekly) are not correctly closed, when the end time is reached. Only when the corresponding keyer logs out, recording into this session is stopped. However, at the Supervisor UI this session will be displayed as if it was pending furthermore. Captured by PT #30377.

Apartment number with dash

Apartment number entered as, e.g. 12-1, however, the coa got entered with an apt number of 121 without the dash. This has been corrected. The RCD no longer drops the dash in secondary information.

Alhambra vs. La Puente problem

The error is corrected. An issue with the following type of address:

PO BOX 3482
CITY OF INDUSTRY CA 91744

ended up in COARS as "PO BOX 3482 in Alhambra CA 91803".

This happened because when the ZIP Code then PO BOX was keyed, the correct PO BOX was found, but the city was changed to the preferred name of "LA PUENTE". When the keyer didn't keep this (since it didn't match the COA Form), the outward extraction for "City of Industry" was keyed, and sent to DBL with the input ZIP Code. Because "City of Industry" is an alias for 91744, but also a preferred name in another finance number, the "City of Industry" entry in the other finance number was returned. Then when the PO BOX request was resent with the new finance number, we matched to the only PO BOX match in that finance number, which is in 91803. The preferred name for ZIP 91803 is Alhambra.

Xdbl 16.12 resolves this issue, because it keeps the "City of Industry" match that matches the finance number of the input ZIP Code, so when the PO BOX request is sent with the result from the outward keying with zip, we correctly resolve it to "91744-0482-82" in "City of Industry CA", which is an alias name.

Improve VDT Load times

XP OS image distribution to VDTs is performed by Ghost Casting Software on Drive Duplicator. Post-install scripts take care of reconfiguring hosts as per siteconfig.ini.

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OKI Printer set as default printer

This is fixed by providing both the PDF generating printer driver and the OKI as part of the OS images.

Improved CTS Lessons load instructions in CTS SVD for Rev.8

The CTS Rev.8 SVD has been updated completely to be more detailed and to also offer recovery procedures.

Improved FSU performance and reconnect behavior

Performance and reconnect behavior have been improved with special regard to FSU cleanup and CI – FSU interaction.

RPDS visibility in NCSC

CI and ci.cfg are fixed to no longer make RPDS visible remotely. The CI no longer shares RPDS information between remote sites.

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13.4. NEW CHANGES FOR IPT 3**PT 61411 No statistics on keyers in “Non Address desk”**

The VDT comparison logic has been fixed so that Auto - Edit sessions will no longer be passed when the keyer enters a wrong input for COA Non-Address and COA Verification coding.

PT 63328 Fixed RIC tour change handling.

RIC will now handle VDTs coding during tour change and avoid loss of statistics data.

PT 63887 Faster statistics report creation

Configuration settings for loading statistics reports have been changed to use less memory and CPU.

PT 64102, 64135, 66469 Activation of new dictionary in REC

Activation of new dictionaries starts now without delay after the new dictionary was detected and download is finished. This also happens if keyers are logged in.

PT 64104 VDT time lag due to wrong color graphics settings

Description added to SVD to change color depth settings from 32 bit to 16 bit, as part of VDT OS installation (no software change).

PT 64140 Loss of Statistics

Improved statistics database handling will prevent loss of statistics in case of RIC restarts.

PT 64141 Updated AFCS list in IMS 4.0.1 Build

Updated and validated AFCS list Rev. 3 is added.

PT 64530 Trigger file handling for shutdown

Using improved remove_nt command in IMS runtime scripts.

PT 65508, 65988 Time lag/coding delays during CTS training

CTS delays due to RIC overload situations are fixed. For delays due to database fill level see PT 69345.

66433, 67087 Improved DUM server

DUM server has now improved routines for changing dictionaries and md5 checks.

PT 66482, 66473 Fixed UMF dictionary download and activation

UMF download and activation no longer cause RIC overload situation.

PT 66667 Coding delay at VDT for short name coding

The performance of the VDT has been improved to faster process many matches returned from CARS, and thus accept keyer input without delay.

PT 66699 Secondary not pursued on some highrise addresses

DBL has been modified to set the appropriate flag to indicate to RCD that it should prompt the keyer for secondary. DBL (xdbl 16.15) will be included in the new build of IMS 4.0.1.

PT 66783 DUM Server crashes during dictionary downloads

Dictionary update manager has been fixed to handle simultaneous DBL and UMF downloads.

PT 66787 Double keying issue

The double keying issue was not reproducible in the lab. We have analyzed the problem and believe it is caused by some rare conditions that relate to some restart problems.

These lead to the point, were only few images (we assume less than 100) were controlled by 2 RICs simultaneously.

Due to the strict processing priority, these images were sent by the 2 RIC to the coding desk nearly simultaneously.

PT 66788 LAN Adapter names not set correctly.

Correct LAN Adapter names are now set by Autolpconfiguration scripts.

PT 66888, 67073 High CPU load when killing explorer for RPDS GUI on RIC

Using improved taskkill command and no longer starting RPDS GUI on RIC.

PT 66894 Support RPDS 2 search for waste mail

The RIC has been extended to send all necessary result data to the RPDS to allow filtering for waste mail in RPDS 2.

PT 66910, Explorer window started for RPDS in the foreground

Supervisor UI will not start a second explorer if explorer is already started.

PT 66916 VDT CTS reviewer

The reviewer component has been fixed to show all error images.

PT 66942, 66699 New DBL version

The new DBL resolves issues for particular addresses.

PT 66944 CIX File Cleanup

Cix File is configured as a managed directory at the REC (although not needed functionally) to ensure cleanup after download.

PT 66946 Do not start SC_USRINT console window

The message log console window is no longer started to avoid high CPU load on RIC when scrolling messages. All messages are still recorded into the event handler log file. For IMS 5.0 graphical replacement for the console window will be provided.

PT 67008 AFR improvements

AFR read rate improvements have been communicate to the USPS. The IPT test procedures will ensure that there is no performance degradation with regard to a regression test deck.

PT 67036 ZIPMOVE

Implementation of ZIPMOVE for AFR.

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PT 67073 RPDS UI shall not be started on RICs

To avoid overload situations RPDS UI can not be started within the menu of a Supervisor UI on a RIC.

PT 67078 Negative statistic counter for VCS Statistics - UAA Mail for "Non Processed"

The non processed counters were reset on tour change and became negative when the corresponding images were processed after a tour change. These counters are no longer changed on tour change.

PT 67082 Kill command

Use improved XP taskkill command in IMS runtime scripts to avoid stuck commands and high CPU load.

PT 67458 Change No Record label content

Implementation of EC7978

PT 67659 UI does not count AFR MAIL CLASS in RTS

In AFR statistics mailclass and endorsement are counted as requested. Mailclass and endorsement are counted as resolved if resolved by AFR.

PT 67890 Image not stored on second backup IH

Some P&DC resent images were only stored on single IH at REC site, this is fixed by setting the operation mode only for the owning IC at REC.

PT 68271 Labeling does not work in some situations

In some situations final results in the FSU got overwritten by initial results.

PT 68903 Lost Images in Ft. Wayne Pre-Beta Site

The images were lost. The results were lost because the new master RIC tried to synchronize results with the previous master RIC. Now the new master RIC will no longer synchronize with a previous master RIC.

PT 68905 Image lost if IC reassignment is stopped

Images were lost because a shutdown RIC was restarted before its image recovery was finished. This is fixed and image recovery will be started after 5 min. of RIC downtime to make recovered images available for coding quicker.

PT 68913 Do not send images to RPDS if image deleted due to no final result available

Images with erroneously lost results were sent to RPDS within a short time and overloaded the system. Images deleted due to missing results are no longer sent to RPDS to avoid overload.

PT 68972 Lost COA Image

In order to avoid losing COA images, a COA image is acknowledged to COA server after the image has been successfully stored on IH.

PT 69345 Improvement for CTS delay due to CDB fill level implementation

The implementation of the DB fill level calculation and forecast was too CPU intensive. In fact, the calculation per database table was completely unnecessary, only records per database are needed for the fill level display.

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ATTACHMENT 3**eMARS REPORTING INSTRUCTIONS**

Maintenance Policies and Programs (MPP) will be tracking modifications authorized by the Engineering Change Board (ECB) via eMARS. Information required on PS Form 4805, **Work Record Sheet**, must be reported for each individual equipment modified as follows:

DESCRIPTION**REMARKS**

Work Order Number

Enter Work Order Number: 3134

Priority

Enter Priority Code:

Work Code

Enter Work Code: 12

Acronym

Enter Equipment Acronym: PARS

Equipment Class

Enter Equip. Class Code: AA

Estimated Work Hours

Enter Estimated Time for Each Piece of Equip:

8 hours for a P&DC with 16 AFR readers (total sum of AFR-I + AFR-II), add 1 hour for each 5 additional AFR readers.

Action Taken Code

Enter: MQN

Direct any questions or comments concerning this bulletin to the HelpDesk, Maintenance Technical Support Center, P.O. Box 1600, Norman OK 73070-1600; telephone FTS 2000 (405) 573-2123 or toll free (800) 366-4123.

SOFTWARE MODIFICATION ORDER

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ATTACHMENT 4**LOCAL RECORD OF BULLETIN COMPLETION**

Complete one form for each piece of equipment that is modified/upgraded. Keep/maintain the completed forms in a "Bulletin Completion File" at your site. This file will be used by area office, and headquarters maintenance management personnel to verify bulletin compliance.

Note: Comments regarding the content of the bulletins (i.e.: clarity/accuracy of instructions, illustrations, etc) can be sent to MTSC via cc:Mail address: "MTSC Bulletin". Upon receipt, the message will be forwarded to the author of the document.

SOFTWARE MODIFICATION ORDER

Bulletin Number:		SMO-022-07
Installed on:	Equipment Type	PARS
	Model Number	
	Serial Number	
	Local Machine ID #	
Located at:	Facility Name	
	Facility Address	
	City, State	
	ZIP + 4 Code	
Work Order #		
Installation Completion Date:		
Completed By:		
Comments:		

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ATTACHMENT 5**RELEASE EVALUATION FORM****INSTRUCTIONS FOR USING THIS FORM****USPS Engineering Customers:**

If you participated in the installation of a new USPS Engineering software release, please take a moment to answer the questions in the attached form. Your evaluation of the quality of the release software and documentation and also the release activities will determine whether the release process satisfies the needs of our customers in the field. Engineering has changed the release process to meet specific improvement requests made by USPS Maintenance and the information you provide will enable us to measure how well Engineering has met these goals.

Please mail the completed form to:

Software Process Management
USPS Engineering
8403 Lee Highway
Merrifield, VA 22082-8181

or FAX it to

Software Process Management
(703) 280-8404

The form is also available via the USPS Engineering web server at
<http://web.eng.usps.gov>

Thank you for your efforts in helping Engineering improve its software development processes and products to better serve our customers.

SOFTWARE MODIFICATION ORDER

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**UNITED STATES
POSTAL SERVICE**
**USPS ENGINEERING
RELEASE EVALUATION FORM**

Date:

SOFTWARE RELEASE (Acronym/Version): PARS / Version 4.0.1		SYSTEM CONFIGURATION (Make & Model):	
☐ Production	DATE SOFTWARE RECEIVED:	DATE SOFTWARE INSTALLED:	SMO-022-07
PERSON'S NAME:		PHONE NO.:	TITLE/ORGANIZATION:
SITE WHERE INSTALLED:			

For each of the questions below, please check the box which best represents your evaluation for this Software Release based upon the following scale:

1 = Strongly Agree, 2 = Agree, 3 = No Opinion, 4 = Disagree, 5 = Strongly Disagree.

QUESTION	1	2	3	4	5
RELEASE PROCESS					
1 - ADVANCE NOTIFICATION - information for this release was provided well in advance					
2 - TIMING - release was timed well with respect to other releases dependent upon this one (if applicable)					
3 - COORDINATION - coordination was adequate with respect to other releases scheduled for this site not directly related to this one					
4 - PERSONNEL NOTIFICATION (Beta Testing only): All required field personnel were adequately notified and available for this test					
SOFTWARE					
5 - COMPLETE - This software provided all of the functional capabilities expected					
6 - TESTING - This software release was adequately tested prior to delivery					
DOCUMENTATION					
7 - READABILITY - The documentation provided with this release was clear and easy to follow.					
8 - BUG IDENTIFICATION - Known bugs in this release were adequately identified in the documentation provided					
9 - SYSTEM IMPACTS - Impacts to other mail systems were adequately identified in the documentation provided					
10 - OPERATIONAL BENEFITS - The operational benefits of this Release were adequately identified in the documentation provided					
11 - RECOVERY INSTRUCTIONS (Installation Failure Only): Recovery instructions provided were adequate to restore system operability					
COMMENTS (For each comment, please indicate the number of the question to which it applies. If more space is needed, please attach a second page.):					

SOFTWARE MODIFICATION ORDER

SOFTWARE MODIFICATION ORDER