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iSeries. mySeries.

iSeries. mySeries.



Common Europe Luxembourg
Introducing IBM eServer i5 & 

Maintain and Manage i5/OS and Related Software
by Eddy Pasteger, REAL Solutions S.A.

Agenda

- Understand
 - ➔ Concepts and definitions : what's what ?
- Find
 - ➔ How to get information about code fixes
- Order
 - ➔ How to get code fixes
- Install
 - ➔ How to install code fixes
- Distribute
 - ➔ Multiple iSeries ? ... Advanced Tips & Techniques !
- Clean
 - ➔ Housekeeping Tasks
- Maintenance Strategy
 - ➔ What to do ?
- Questions & Answers

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Warning !

This presentation contains information about i5/OS V5R3.

While i5/OS is fully compatible with OS/400,
some function presented hereinafter may not work under OS/400.

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Maintain and Manage i5/OS and Related Software

Understand

Concepts and Definitions

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What is a PTF ?

- Program Temporary Fix
 - A temporary solution to a bug in a software product
 - Someone encounters a problem (and reports it)
 - An Authorized Problem Analysis Report (APAR) is opened
 - A PTF is made available, the APAR is closed
 - The PTF is provided to the development group who works on the next release
- Also known as "FIX"
 - The term "PTF" is used within the character-based interface
 - The term "FIX" is used within the graphical interface
 - Both means the same thing

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Single fixes

- HIPER PTF
 - High-impact and/or PERvasive
 - Correct severe problems that can occur on the system
 - Examples :
 - The system crash or hang and requires an IPL to recover
 - The system is stuck in a looping condition
 - The system's data integrity is threatened
 - The system experience a severe performance degradation

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Single fixes

- Requisites PTF
 - PRE-Requisite PTF
 - A fix that must be installed before or at the same time as the fix you want to install
 - CO-Requisite PTF
 - A fix that must be installed at the same time as the fix you want to install

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Single fixes

- Types of PTF
 - Delayed PTF
 - A fix that requires doing an IPL to be applied
 - Immediate PTF
 - A fix that can be applied without doing an IPL



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Packages of fixes

- Cumulative PTF packages
 - A collection of fixes for a given release of i5/OS and associated programs
 - Contains all the fixes of the previous packages plus some new ones
 - CYDDDVVRM
 - Y is the last digit of the year
 - DDD is the Julian day
 - VRM is Version Release and Modification
 - Example
 - C4209530 is the cumulative package made available on August 3rd, 2004 for i5/OS version 5 release 3 modification 0
 - Not all fixes are included into cumulative packages
 - Some fixes are only applicable to specific situation and/or applications
- Also known as "CUMPACK"



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Packages of fixes

- PTF Groups
 - A list of fixes defined to be managed as one entity
 - SF99xxx
 - Main PTF groups are
 - HIPER
 - DB2/UDB
 - WebSphere Application Server
 - Java
 - Backup & Recovery
 - Performance Tools
 - HTTP Server

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Packages of fixes

- Service Packs
 - A collection of code fixes for :
 - iSeries Access for Windows
 - Windows Integration
 - After installation on the system, deployment actions are required

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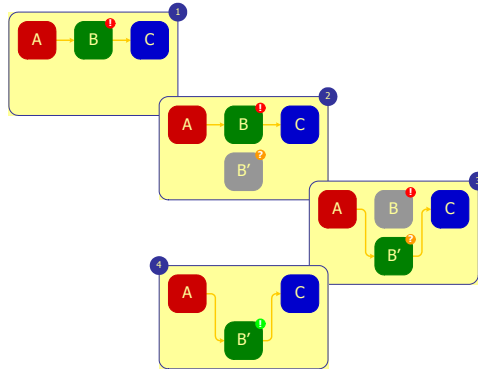
How PTFs are made active ?

▪ Software PTF

→ Numbered : S1xxxx

→ Status

- On Order
- Save File Only
- Not Applied
- Temporarily Applied
- Permanently Applied
- Superseded



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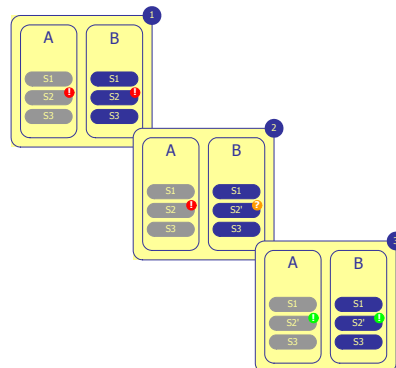
How PTFs are made active ?

▪ Microcode PTF

→ Numbered : MFxxxx

→ Status

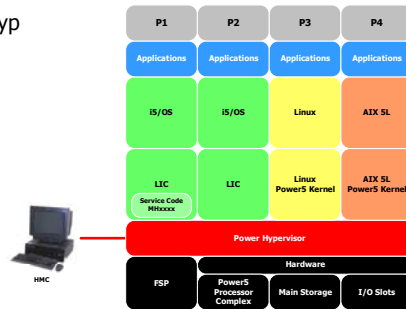
- On Order
- Save File Only
- Not Applied
- Temporarily Applied
- Permanently Applied
- Superseded



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How PTFs are made active ?

- Hypervisor PTF
 - Numbered : MHxxxxx
 - Status
 - On Order
 - Save File Only
 - Not Applied
 - Temporarily Applied
 - Permanently Applied
 - Superseded
 - Special actions required to update pHyv



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Maintain and Manage i5/OS and Related Software

Find

How to get information about code fixes

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Sources of Information

- Electronic Customer Support
 - SNDPTFORD PTFID(SFxxxxx)



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Sources of Information

- <http://www.ibm.com/server/eserver/support/iseries/index.html>



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Sources of Information

- <http://www.ibm.com/server/eserver/support/iseriess/index.html>

→ Go through :

- "Technical Databases"
- "Preventive Service Planning - PSP"
- "Preventive Service Planning Documents by Release"
- "R530"



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Sources of Information

- <http://www.ibm.com/server/eserver/support/iseriess/index.html>

The screenshot shows the IBM iSeries Support website. The main heading is "Preventative Service Planning - PSP" with the subtitle "All Preventive Service Planning Documents by Release". Below this, there are tabs for "Previous", "Next", "Expand", "Collapse", and "Search". A table lists various PSP documents, including hardware information, software installation instructions, and performance tools, with their last update dates. The table has two columns: "Type of PSP" and "Last Update".

Type of PSP	Last Update
MF20530: Hardware LRC Information	9/22/2004 4:30:50 PM
SF20530: Cumulative PTF Package download links	6/7/2004 11:40:11 AM
SF27072: VERSION 5 REL 1.0 TO VERSION 5 REL 3.0 PTF/FIX CROSS	9/28/2004 1:21:54 AM
SF27071: VERSION 5 REL 2.0 TO VERSION 5 REL 3.0 PTF/FIX CROSS	9/28/2004 1:21:21 AM
SF27530: FIX SUMMARY LISTING FOR VERSION 5 RELEASE 3.0	9/28/2004 10:35:33 AM
SF20000: Software Installation Information	9/22/2004 4:31:07 PM
SF20001: No Cumulative PTF assigned yet	9/25/2004 6:12:18 PM
SF20002: C4154530 Cumulative PTF Package Instructions	9/25/2004 6:12:23 PM
SF20003: C4305530 Cumulative PTF Package Instructions	9/23/2004
SF20005: Current Cumulative PTF Package	9/22/2004 4:33:57 PM
SF20006: iSeries Memorandum to Users	6/25/2004 1:40:54 PM
SF20007: Summary of H/PER and Defective PTFs	9/22/2004 4:33:06 PM
SF20008: Defective PTFs	9/14/2004 4:12:49 PM
SF20009: IBM iSeries Reproductive PTFs (H/PER)	9/22/2004 4:33:52 PM
SF20010: Upgrade and Migration Corrections (Info Center)	6/17/2004 4:20:30 PM
SF20530: Current Cumulative PTF Package	9/22/2004 4:34:14 PM
SF20009: 530 IBM HTTP Server for iSeries	9/3/04
SF20010: 530 Performance Tools	9/1/04
SF20011: 530 IBM Business Solutions	9/3/04
SF20012: 530 530 Backup Recovery Solutions	9/1/04

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Sources of Information

- <http://www.ibm.com/server/eserver/support/iserics/index.html>

→ The most useful documents :

- SF98530 – Current Cumulative Package
- SF9808X – Cumulative Package Installation Instructions
- SF98087 – Summary of HIPER and Defective PTFs
- SF98088 – Defective PTFs
- SF98089 – High Impact/Pervasive PTFs (HIPER)
- SF98086 – iSeries Memorandum to Users
- SF98080 – Software Installation Information

→ Also available through ECS ... SNDPTFORD PTFID(SFxxxxx) !

- Document stored as a cover letter member into QGPL/QAPZCOVER

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Sources of Information

- Preventive Service Planning Documents

→ Contents

- Last updates
- Last cumulative PTF package
- Next cumulative package
- General information about support websites and PSPs
- Pre-HIPER information : about Circumventions for future HIPER PTFs
- General information : about Installation and Operations
- Service information : about HIPER/Pervasive
- PTFs in error

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Sources of Information

- <http://www.ibm.com/server/eserver/support/series/index.html>

→ Go through :

- "Technical Databases"
- "Preventive Service Planning - PSP"
- "All Group PTF by Release"
- "R530"



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Sources of Information

- <http://www.ibm.com/server/eserver/support/series/index.html>


The screenshot shows the IBM iSeries Support website. The main heading is "Preventative Service Planning - PSP". Below this, there is a table of Group PTFs. The table has columns for Title, Group, Level, and Last Updated. The table lists various PTFs for the R530 group, including those for OS/400, WebSphere, and Express Edition. The table is filtered by the R530 group.

Title	Group	Level	Last Updated
SE99528 430 Group Master	R530	Level 17	09/20/2004
SE99528 430 OS/400 for iSeries	R530	Level 2	09/20/2004
SE99289 430 WebSphere App Server Advanced Edition V4.0	R530	Level 2	08/03/2004
SE99289 430 WebSphere App Server Advanced Edition V4.0	R530	Level 1	08/03/2004
SE99287 430 WebSphere App Server V5.0 (Base Edition)	R530	Level 3	08/03/2004
SE99287 430 WebSphere App Server V5.0 (Base Edition)	R530	Level 4	08/03/2004
SE99286 430 WebSphere App Server V5.0 V5.1	R530	Level 2	08/11/2004
SE99285 430 WebSphere App Server V5.1 (Base Edition)	R530	Level 4	08/11/2004
SE99284 430 IBM Cloud Toolbox V2.0 for OS/400	R530	Level 1	09/23/2004
SE99282 430 WebSphere Portal Express/Express Plus Service P	R530	Level 2	08/03/2004
SE99275 430 WebSphere App Server - Express V5.1	R530	Level 2	08/06/2004
SE99277 430 WebSphere App Server - Express V5.0	R530	Level 4	08/13/2004
SE99269 430 Java	R530	Level 2	08/13/2004
SE99185 430 5.0 Backup/Recovery Solutions	R530	Level 2	08/13/2004
SE99172 430 IBM Business Solutions	R530	Level 1	08/03/2004
SE99138 430 Performance Tools	R530	Level 1	08/01/2004
SE99089 430 IBM HTTP Server for iSeries	R530	Level 2	08/02/2004

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Sources of Information

- Group PTF Documents



[Home](#) | [Products & services](#) | [Support & downloads](#) | [My account](#)

[Select a country](#)



iSeries Support

Technical databases
 > APARs

Preventive Service Planning - PSP

530 Group-Header Release - R530

PTF Cover Letters

Software Knowledge Base

Registered Software Knowledge Base

SP59529: 530 Group Header PTF Group Level: 17
 Last Updated: 8/22/04
 How to bypass: WSPPTSPR SP59529
 Descriptions: All RFPs state General availability of WSPR30 Planned Update Scheduler. Every other Tuesday of each month or sooner when necessary.
 Related PTF Group(s): None
 How to Order: Refer to <http://www.ibm.com/serveit/series/psppsp>
 Select -> 'Fixes' and then select 'PTF Ordering'

PTF NUMBER	DATE ADDED	APAR	LICENSED	CUMULATIVE	PROGRAM	PACKAGE
RF33940	09/22/04	RA30053	5321999	1000		
RM00142	09/22/04	RM00664	5321999	1000		
RF33884	09/22/04	RA33997	5321999	1000		
RM00134	09/21/04	RM00645	5321999	1000		
RF33907	09/21/04	RA33947	5321999	1000		
RF33921	09/21/04	RA33021	5321999	1000		
RF33082	09/21/04	RA33996	5321999	1000		
RF33812	09/21/04	RA32932	5321999	1000		
RF33912	09/21/04	RA30024	5321999	1000		
RF33879	09/21/04	RA33963	5321999	1000		
RF33613	09/14/04	RA32297	5321999	1000		
RM00132	09/14/04	RM00624	5321999	1000		
RF33805	09/14/04	RA33005	5321999	1000		

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Sources of Information

- Check your Server Levels
 - ➔ DSPPTF ...
 - ➔ WRGPTFGRP ...

Check your Server Levels

- DSPPTF ...
- WRGPTFGRP ...

Session A - [24 x 80]

Work with PTF Groups

System: LUPRADIOL

Type options, press Enter.

4=Delete 5=Display 6=Print 8=Display special handling PTFs

9=Display related PTF groups

Opt	PTF Group	Level	Status
-	SP99530	4209	Installed
-	SP99529	9	Installed
-	SP99503	1	Installed
-	SP99529	2	Not installed

Session A - [24 x 80]

Display PTF Status

System: LUPRADIOL

Product ID : 5722999

IPL source : ##PACHB

Release of base option : YSR3MD L00

Type options, press Enter.

5=Display PTF details 6=Print cover letter 8=Display cover letter

Opt	PTF ID	Status	IPL Action
-	TL04209	Temporarily applied	None
-	TL04153	Permanently applied	None
-	TL04118	Superseded	None
-	TL04083	Superseded	None
-	RE04113	Permanently applied	None
-	RE04097	Permanently applied	None
-	RE04082	Permanently applied	None
-	RE04061	Permanently applied	None
-	RE04041	Permanently applied	None

F3=Exit F11=Display alternate view F17=Position to F12=Cancel

More...

06/003

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Sources of Information

- Check your Server Levels

- DSPPTF ...
- WRGPTFGRP ...

```
Session A - [24 x 80]
General Information
Product ID/PTF ID : S722999 HF33548
Release : Y5R3M0
On order : No
PTF save file : No
PTF status : Temporarily applied
Latest superseding PTF : None
Status date/time : 05/08/04 22:45:25
Type : Immediate
Unattended IPL action : None
Optional part : *BASE
PTF library : QGPL
Cover letter : No
Mandatory instructions : No
Test Fix : No
Action pending : No
Press Enter to continue
F3=Exit F12=Cancel
01/001
```

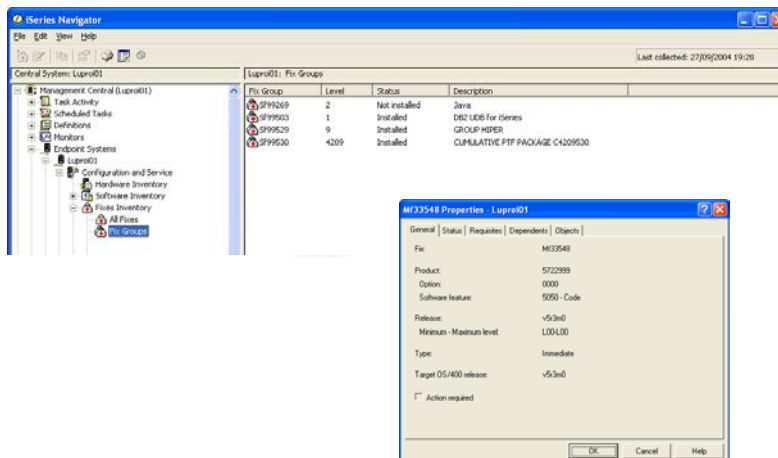
```
Session A - [24 x 80]
Display PTF Details
Product ID/PTF ID : S722999 HF33548
Release : Y5R3M0
Select one of the following:
1. General information
6. PTF Objects
7. Symptom strings
9. APARs fixed
20. All of the above
Bottom
21/007
```

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Sources of Information

- Check your Server Levels

- iSeries Navigator & Management Central



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Sources of Information

- Where to find information about service packs ?

→ iSeries Access for Windows

- <http://www.ibm.com/servers/eserver/iseries/access/>
- Go through : « Service Packs (Fixes) »

iSeries Access for Windows Service Packs

Table of Contents:

- [Latest Service Packs for Supported Releases](#)
- [Problems downloading a Service Pack?](#)

Related Links:

- [Service Pack History \(All Releases\)](#)
- [iSeries Access Tool-Kit Service Packs](#)
- [iSeries Access Connection Information](#)

Latest Service Packs for Supported Releases

- To see service packs for every release, refer to [Service Pack History for All Releases](#).
- For problems downloading a service pack, [click here](#).
- For support information on iSeries Access and the Microsoft Windows operating systems, [click here](#).

iSeries Access for Windows (Client Access Express) (5722-XC1) Release Level	Latest Service Pack PTF Number	Server Maintenance	Date PTF was Available	Installed File Date	Target for Next Service Pack
V5R3M0	S015175	Refer to Server Notes	September 3, 2004	09/03/2004	December 10, 2004
V5R2M0	S014294	Refer to Server Notes	June 23, 2004	06/09/02	November 19, 2004
V5R1M0	S011806	Refer to Server Notes	April 30, 2004	05/08/01	Not in plan

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Sources of Information

- Where to find information about service packs ?

→ Windows Integration

- <http://www.ibm.com/servers/eserver/iseries/access/>
- Go through : « Service Information », then « Service Packs »

Windows and Linux integration service pack PTFs

Below are the iSeries Integration for Windows Server service packs available in i5005 or OS/400 PTFs, along with the cumulative PTF package that contains the service pack. You can order PTFs via Electronic Customer Support (ECS) or [Internet PTF Downloads](#), or find more information on the [iSeries Fixes](#) web page. Additional iSeries service information can be found at <http://www.ibm.com/servers/eserver/iseries/support>.

Service Pack PTF	Cumulative PTF Package	Date PTF Available
Windows 2000 and Windows Server 2003		
V5R3M0	S014437	23 July 2004
V5R2M0	None	None
V5R1M0	None	None
Windows 2000		
S005728	C2021520	5 September 2002
S006475	C3021520	17 October 2002
S006875	C3021520	19 November 2002
S007088	C3077520	20 February 2003
Windows 2000 and Windows Server 2003		
V5R3M0	S008112	9 July 2003
V5R2M0	S009740	20 August 2003
V5R1M0	S010102	8 October 2003
S010250	C3364520	20 October 2003
S010465	C3364520	18 November 2003
S010810	C4244520	20 February 2004
S012671	none	21 May 2004
S015225	none	27 August 2004
V5R3M0	None	None
V5R2M0	None	None
V5R1M0	None	None

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Maintain and Manage i5/OS and Related Software

Order

How to get code fixes

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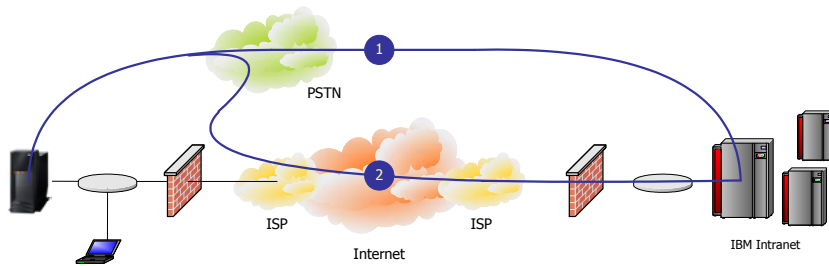
How to get fixes ?

- Electronic Customer Support
 - ➔ Inventory
 - ➔ Problem Reporting
 - ➔ Fixes
 - ➔ Remote Support



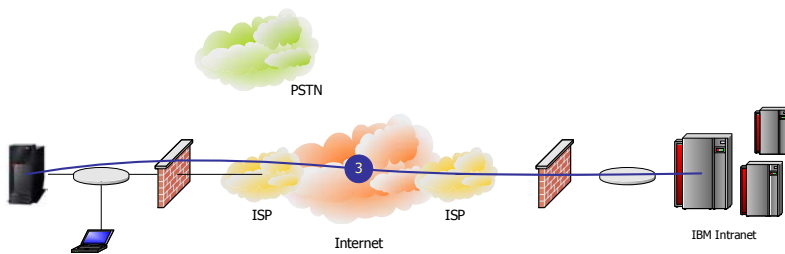
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ECS thru Modem Connection



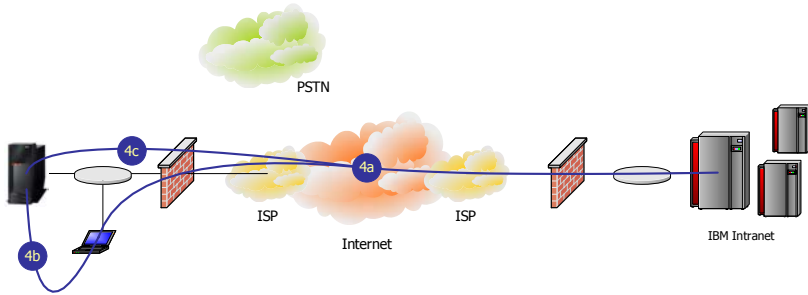
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ECS thru Virtual Private Network



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FIX CENTRAL thru Internet



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Get fixes thru ECS

```
Session A - [24 x 80]
Send PTF Order (SNDPTFORD)

Type choices, press Enter.

PTF description:
PTF identifier . . . . .
Product . . . . . *ONLYPRD Character value
Release . . . . . *ONLYRLS *ONLYRLS, VxRxMx
+ for more values _
PTF parts . . . . . *ALL *ALL, *CVLTRA
Remote control point . . . . *IBMSRV Name, *IBMSRV, *SELECT
Remote network identifier . . *NETATR Name, *NETATR

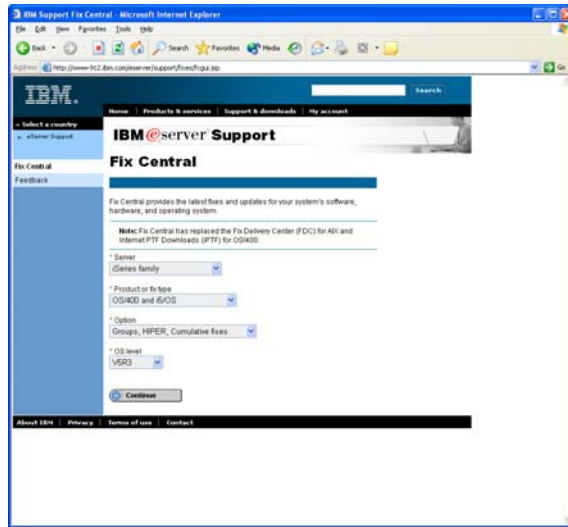
Additional Parameters
Delivery method . . . . . *LINKONLY *ANY, *LINKONLY
Order . . . . . *REQUIRED *REQUIRED, *PTFID
Reorder . . . . . *NO *NO, *YES
Check PTF . . . . . *NO *NO, *YES

Bottom
F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display
F24=More keys

ME a 05/035
```

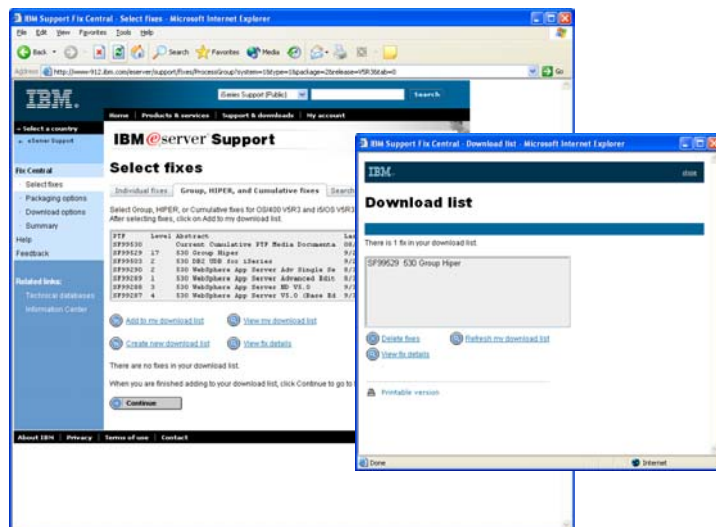
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Get fixes thru FIX CENTRAL



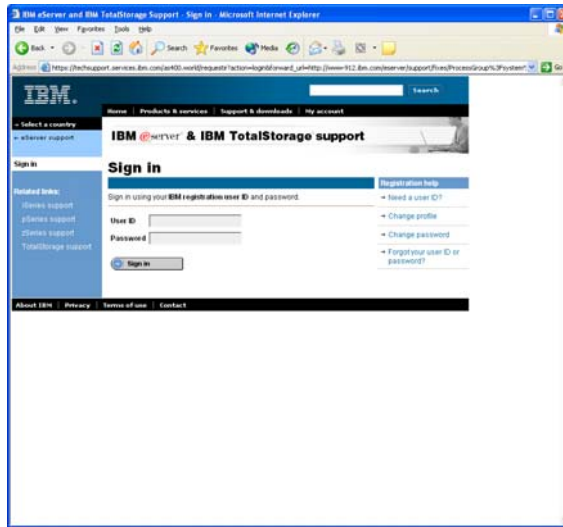
iSeries. mySeries.

Get fixes thru FIX CENTRAL



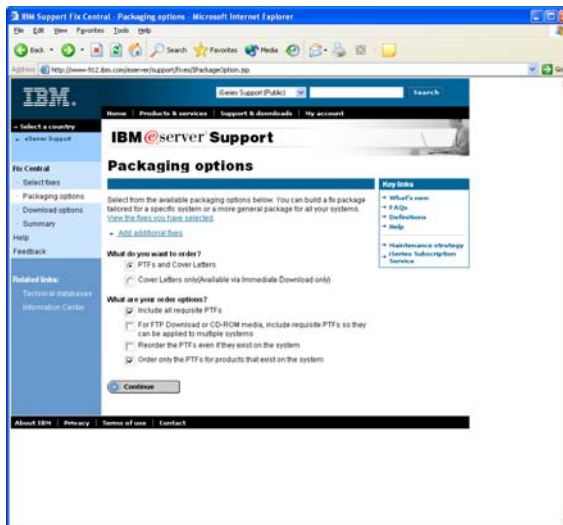
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Get fixes thru FIX CENTRAL



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Get fixes thru FIX CENTRAL



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Get fixes thru FIX CENTRAL

IBM Support Fix Central - Download options - Microsoft Internet Explorer

IBM®server Support

Download options

You may select Immediate Download, FTP server, or both methods. If you select both methods, Immediate Download will be attempted first.

☒ **Immediate Download over the Internet (HTTP)**

Please fill out the options below:

What is the maximum size that you want to download immediately?
Maximum allowable

What is the speed of your internet connection?
Cable Modem/DSL

☒ **Download CD-ROM image to FTP server (FTP)**

Requires Virtual Optical support (on VSR2 and later) or a PC with CD writer and software.

What is the maximum size that you want to download to the FTP server?
Maximum allowable

Customize the directory and base file name of the CD images on the FTP server. **Note:** The directory name will automatically be converted to lower case, but the file name can consist of mixed case characters.

* Directory name: iSPROD1 (for example: myrect1 or test1B)

* File name: 0299029 (for example: CDGroup or VASGroup)

☐ **Mail order on CD-ROM if the total size exceeds the limits you selected above**

Where is the target system installed?
Specify the location of the system where the PTF's will be downloaded.

Western Hemisphere / Central America / South America / Europe

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Get fixes thru FIX CENTRAL

IBM Support Fix Central - Microsoft Internet Explorer

IBM®server Support

Log on to your iSeries or AS/400 system that is the target system for the fix.

Enter name or TCP/IP address: iSPROD1

User ID:

Password:

☐ View or update your shipping information for this order

Back Next Cancel Your Privacy Help

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Get fixes thru FIX CENTRAL

The screenshot shows the IBM Support Fix Central registration page in a Microsoft Internet Explorer browser. The page title is "IBM Support Fix Central - Microsoft Internet Explorer". The URL in the address bar is "http://www-912.ibm.com/ibmserver/support/fixes/DownloadRegister.asp". The page features the IBM logo and "IBM@server Support" header. A left sidebar contains links for "Select a country", "Fix Central", "Select fixes", "Packaging options", "Download options", "Summary", "Help", "Feedback", and "Related links". The main content area is titled "Email address verification failed. Verify your email address." and contains a registration form with the following fields: Company (REAL Solutions), Contact (Edy Peringer), Contact telephone number (+352 480522 602), Alternate (+352 621 195021), E-mail address (edp.peringer@real.lu), Verify e-mail address, Mailing address, Street address (Rue d'Ench, 33), City/Town (Luxembourg), Country (Luxembourg), Zip code (L-1461), and National language version (LSA). At the bottom of the form are buttons for "Back", "Next", "Cancel", "Your Privacy", and "Help".

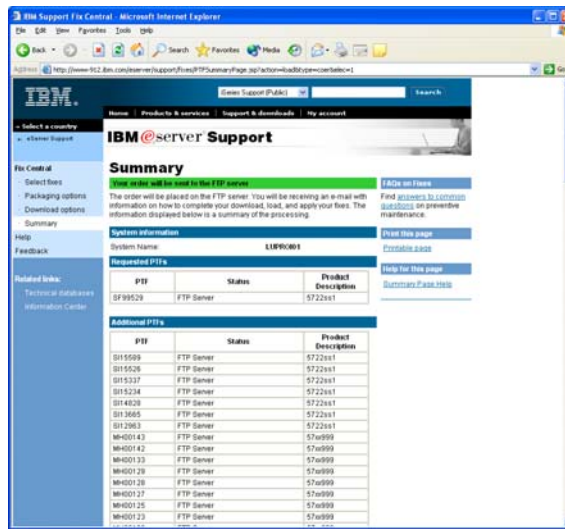
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Get fixes thru FIX CENTRAL

The screenshot shows the IBM Support Fix Central download progress page in a Microsoft Internet Explorer browser. The page title is "IBM Support Fix Central - Microsoft Internet Explorer". The URL in the address bar is "http://www-912.ibm.com/ibmserver/support/fixes/mc/DownloadRegister.asp". The page features the IBM logo and "IBM@server Support" header. A left sidebar contains links for "Select a country", "Fix Central", "Select fixes", "Packaging options", "Download options", "Summary", "Help", "Feedback", and "Related links". The main content area is titled "Processing PTF order" and displays download progress information: Total download size (414,640 Bytes), Current PTF (SP14802 (2 of 12)), Download rate (0.5 KB per second), Elapsed time (00:01:00), and Estimated time remaining (00:11:10). At the bottom of the page are buttons for "Back", "Next", "Cancel", "Your Privacy", and "Help".

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Get fixes thru FIX CENTRAL



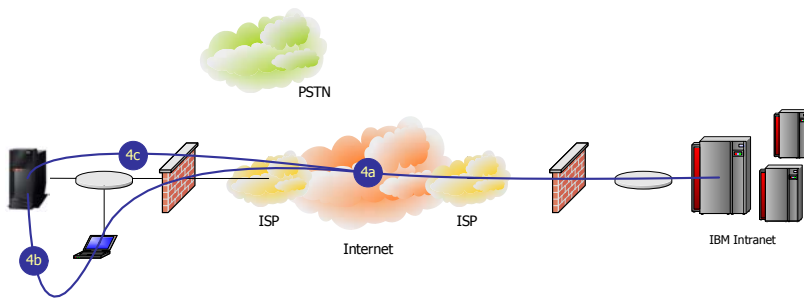
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Get fixes thru FIX CENTRAL

```
COERVER = 34-STATUS SOURCE = EMAIL COERNBR = 317752 PROBNBR = 04887
BO_NMBR = 999 CNTYNBR = 101 FRMNODE = BLDISDMC FRMUSER = R37OACK
TO_NODE = NONE TO_USER = NONE SHPDATE = 20040929091014
TEXT =
TEXT = --> YOUR FIX PACKAGE IS READY <--
TEXT =
TEXT =
TEXT = SDF Order# B5786956 is ready 20040929
TEXT =
TEXT = Thank you for using the FTP server for your support
TEXT = needs. If you received this notice in error, please
TEXT = disregard. You will not be receiving any additional
TEXT = correspondence related to this transaction.
TEXT =
TEXT = -----
TEXT = Note: The fix package will be deleted in 48 hours.
TEXT = -----
TEXT =
TEXT = INFORMATION YOU WILL NEED TO RETRIEVE YOUR ORDER
TEXT =
TEXT = Your userid --> as9rb4m
TEXT = Your password --> t4qBdb8w
TEXT = FTP server --> inetsd01.boulder.ibm.com
TEXT = Transfer type --> ascii/binary
TEXT = Directory on server --> /b5786956/lupro101/c
TEXT = Files to get --> ftpSF99529.txt
TEXT = --> 11stSF99529.txt
TEXT = --> SF99529_1.bin
TEXT =
TEXT = Notes:
TEXT = 1) The ftpSF99529.txt file contains the number of bytes in
TEXT = each file.
TEXT = 2) The 11stSF99529.txt file contains information and
TEXT = instructions for your order.
TEXT = 3) Each ".bin" file contains one virtual CD image.
```

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Get fixes thru FIX CENTRAL



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Maintain and Manage i5/OS and Related Software

Install

How to install code fixes

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Cover Letter

- PTF Save Files are located into library QGPL
 - QMFxxxxx
 - QMHxxxxx
 - QSFxxxxx
- PTF Cover Letters are located into file QGPL/QAPZCOVER



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Cover Letter

- Sample PTF Cover Letter

IBM @server iSeries Support

PTF#	SI14437 - Integration for Windows 2000 and 2003
Licensed Program	5722WSV
APAR Fixed	GE16115
Release	530
Cum Level	

Abstract

INCORROUT - OSP - WSV Service Pack

Pre-Co-Requsite PTF / Fix List

REQ	LICENSED		PTF/FIX	LEVEL	
TYPE	PROGRAM	REL	NUMBER	MIN/MAX	OPTION
-----	-----	-----	-----	-----	-----
PRE	5722WSV	530	SI14407	NONE	0002
PRE	5722WSV	530	SI14058	NONE	0002
PRE	5722WSV	530	SI14069	NONE	0002
PRE	5722WSV	530	SI14039	NONE	0002

NOTICE:

Application of this PTF may disable or render ineffective programs that use system memory addresses not generated by the IBM translator, including programs that circumvent control technology designed to limit interactive connectivity to authorized levels. This PTF may be a nonterminating

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Cover Letter

■ Sample PTF Cover Letter

APAR Error Description / Circumvention

DESCRIPTION OF PROBLEM FIXED FOR APAR SE16115 :

Service pack for iSeries Integration for Windows server.

CORRECTION FOR APAR SE16115 :

This PTF indicates that the following PTF's have been applied to your Windows server once you have run the synchronize function on the Windows server.

SI14407..: New Ethernet drivers are provided for 5700 and 5701 adapters, updated drivers for the 2692 10/100 port.

SI14788..: Correction to the silent synchronization process when used to remove device drivers.

SI14199..: Serviceability support for new Ethernet drivers.

SI14050..: Dynamically unlinking storage from a Windows Server.

SI13928..: Windows storage device driver updates.

SI14839..: Serviceability support for update Windows storage device drivers.

SI14869..: Prevention of hardware failures during Windows shutdown and reboot.

To remove any iSeries Integration for Windows Server PTFs from your Windows Server, first remove them from the iSeries and then run the synchronize function on the Windows server.

Note: Removing just this service pack PTF will not remove any of the PTFs listed above. To remove this service pack PTF and all of the PTFs listed above, you must first remove this service pack PTF from the iSeries, then remove the PTFs listed above from the iSeries and then run the synchronize function on the Windows server.

For more information on an individual PTF including special instructions, please refer to the cover letter of that PTF.

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Cover Letter

■ Sample PTF Cover Letter

Activation Instructions

None.

Special Instructions

None.

Default Instructions

THIS PTF CAN BE APPLIED IMMEDIATE OR DELAYED.

Supersedes

PTF/FIX NO(S). APAR TITLE LINE

NONE

Summary Information

System.....iSeries
Models.....
Release.....V5R3M0
Recompile.....N
Library.....QNTAP
MRI Feature.....NONE

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Installation Process

- Load the PTF
 - ➔ LODPTF LICPGM() DEV() SELECT() SPRPTF(*YES *APYPERM/*NOAPY)
- Apply an immediate PTF
 - ➔ APYPTF LICPGM() SELECT() APY(*TEMP/*PERM) DELAYED(*NO)
- Mark a delayed PTF for application at next IPL
 - ➔ APYPTF LICPGM() SELECT() APY(*TEMP/*PERM) DELAYED(*YES) + IPLAPY(*YES *APYPERM/*NOAPY)
- Verify
 - ➔ Check the job log
 - ➔ GO LICPGM, Option 50
- Process any activation/special instruction
 - ➔ Refer to cover letter

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Removal Process

- Only temporarily applied PTFs can be removed
- Remove an immediate PTF
 - ➔ Temporarily :
 - RMVPTF LICPGM() SELECT() RMV(*TEMP) RMVDEP(*YES)
 - The PTF will be temporarily removed, it will be applied again
 - ➔ Permanently :
 - RMVPTF LICPGM() SELECT() RMV(*PERM) RMVDEP(*YES)
 - SLIC fixes must be always removed permanently
- Remove a delayed PTF
 - ➔ Temporarily :
 - RMVPTF LICPGM() SELECT() RMV(*TEMP) RMVDEP(*YES)
 - ➔ Permanently :
 - RMVPTF LICPGM() SELECT() RMV(*PERM) RMVDEP(*YES)
 - SLIC fixes must be always removed permanently
 - ➔ Do an IPL to the B-Side to process to the removal process

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Install a Cumulative Package

* Rule 1 *

Refer to instructions related to the package

* Rule 2 *

Always refer to instructions related to the package

* Rule 3 *

If you think that you are clever enough to process to the cumulative package installation without instructions, please read again rules 1 & 2

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Install a Cumulative Package

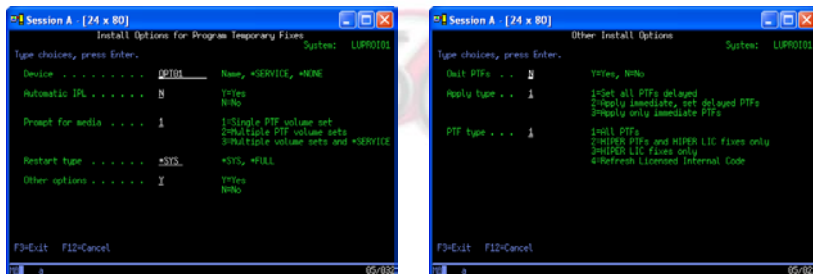
▪ Pre-installation tasks

- Copy all the cover letters for PTF that are not already applied
 - CPYPTFCVR DEV() LICPGM(*ALL) SELECT(*NOTAPY)
- Review all the cover letter for PTF with activation/special instructions
 - DSPPTFCVR LICPGM(*ALL) SELECT(*NOTAPY) CVRATR(*SPCINST)
- Perform required backups

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Install a Cumulative Package

- Installation tasks
 - Check for requisite PTF, according cumpack specific instructions
 - GO PTF, Option 8



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Install a Cumulative Package

- Installation tasks
 - Perform an IPL to B-Side
 - PWRDWSYS OPTION(*IMMED) RESTART(*YES) IPLSRC(B)
 - WARNINGS !
 - PTFs will not be applied during an abnormal IPL or during an attended IPL
 - DO NOT INTERRUPT PTF INSTALLATION PROCESSES !
 - SLIC PTF installation : SRC C600:4400 and SRC C600:4401
 - i5/OS PTF installation : SRC C900:2967
 - DAMAGE MAY OCCUR !

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Install a Cumulative Package

- Post-installation tasks

- Verify the installation

- GO LICPGM, Option 50 (Install History)
 - Check for messages :

```
PTF installation process started.  
Loading of PTFs started.  
Loading of PTFs completed successfully.  
Marking of PTFs for delayed application started.  
Marking of PTFs for delayed application completed successfully.  
PTFs installed successfully.  
Apply PTF started.  
Applying of PTFs for product 5722999 completed successfully.  
Applying of PTFs for product 5722SS1 completed successfully.  
Applying of PTFs completed.  
PTFs applied or removed during IPL.
```

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Maintain and Manage i5/OS and Related Software

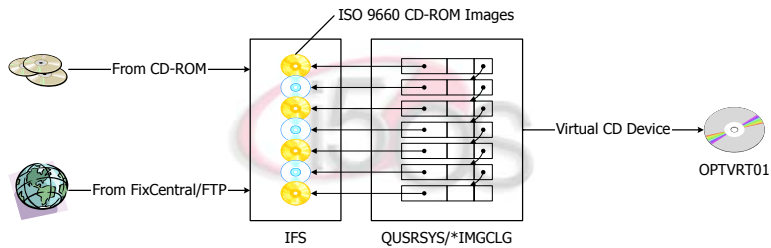
Distribute

Multiple iSeries ? ... Advanced Tips & Techniques

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Virtual Media Install

- What is it ?



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Virtual Media Install

- How does it work ?
 - ➔ This functionality requires OS/400 V5R2 or i5/OS V5R3 !
 - ➔ Create a virtual optical device :
 - CRTDEVOPT DEVD(OPTVRT01) RSRNAME(*VRT)
 - VRYCFG CFGOBJ(OPTVRT01) STATUS(*ON)
 - ➔ Create and populate an image catalog :
 - CRTIMGCLG IMGCLG(CUMPACK) DIR('/real/imgclg/cumpack') CRTDIR(*YES)
 - ADDIMGCLGE IMGCLG(CUMPACK) FROMDEV(OPT01)
 - or
 - ADDIMGCLGE IMGCLG(CUMPACK) FROMFILE(/real/ftp/temp/sf99529_1.bin)
 - ➔ Link the image catalog to the virtual optical device :
 - LODIMGCLG IMGCLG(CUMPACK) DEV(OPTVRT01) OPTION(*LOAD)
 - VFYIMGCLG IMGCLG(CUMPACK) TYPE(*PTF) SORT(*YES)
 - ➔ Follow your cumpack instructions, use OPTVRT01 as device where requested

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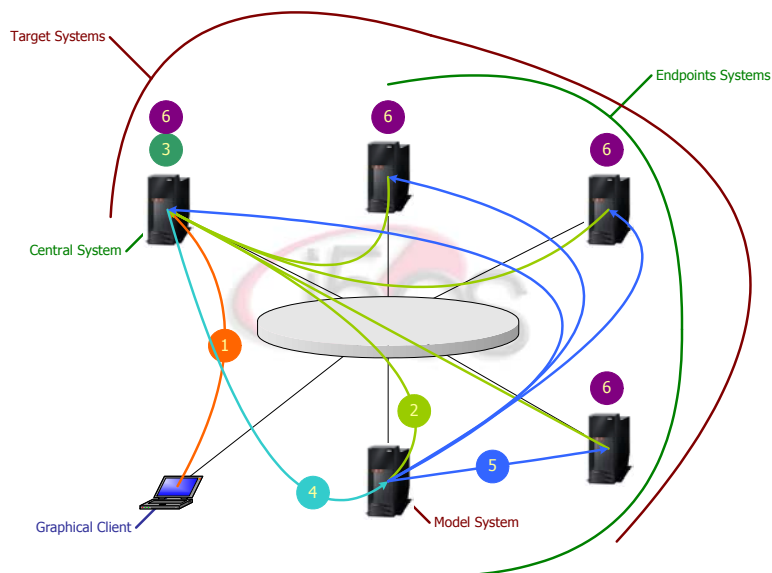
Virtual Media Install

- How does it work ?
 - Unlink the image catalog from the virtual optical device :
 - `LODIMGCLG IMGCLG(CUMPACK) DEV(OPTVRT01) OPTION(*UNLOAD)`
 - Cleanup the image catalog :
 - `DLTIMGCLG IMGCLG(CUMPACK) KEEP(*NO)`
 - `RMVLNK OBJLNK('/real/imgclg/cumpack')`

i50s

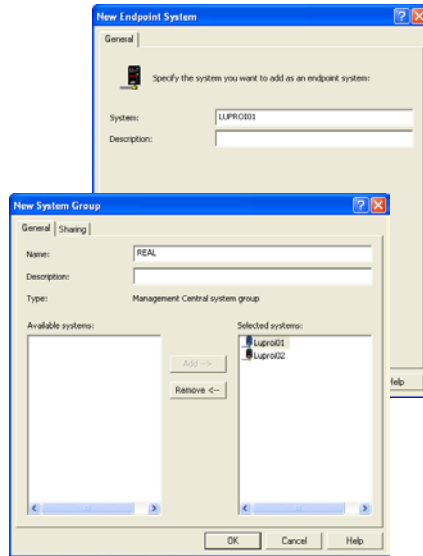
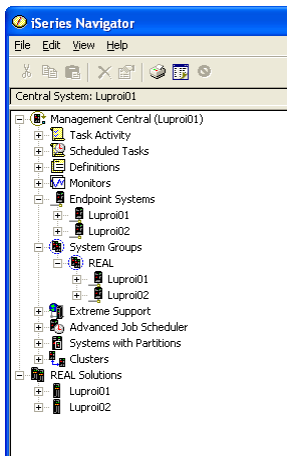
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Management Central - Principles



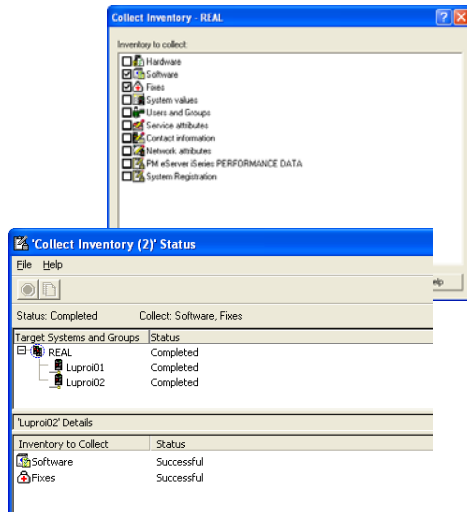
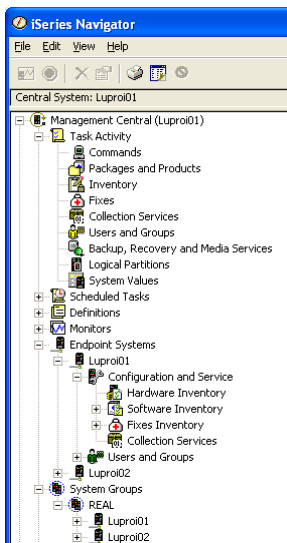
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Management Central – Endpoints & Groups



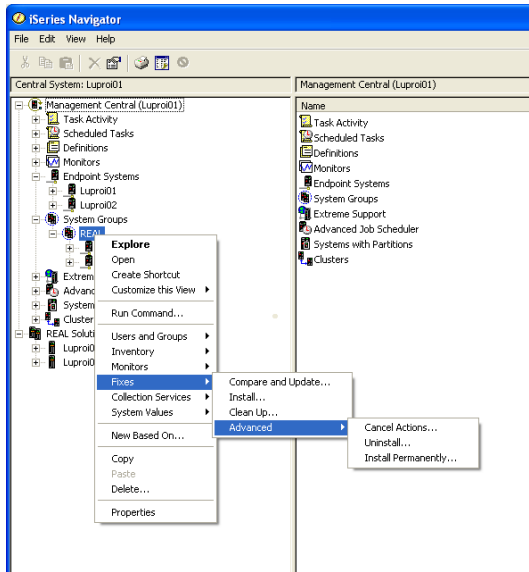
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Management Central – Collect Inventories



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Management Central – Manage Fixes



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Maintain and Manage i5/OS and Related Software

Clean

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Housekeeping Tasks

- Over time, save files and cover letters for fix tend to accumulate !
 - Use the Management Central's Cleanup Function :
 - To an Endpoint System
 - To a Group of Systems
 - Using the Delete PTF Command :
 - DLTPTF PTF(*ALL) LICPGM(*ALL) RLS(*ALL)
 - WARNING!
 - Avoid to manually delete save files or cover letter members !
 - This does not update the internal PTF management indexes !

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Maintain and Manage i5/OS and Related Software

Maintenance Strategy

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Maintenance Strategy

- There is no single recommendation
 - ➔ Each server environment must be assessed
- Questions to consider
 - ➔ What are you doing to prevent system failures ?
 - ➔ Is your standard approach proactive or reactive ?
 - ➔ Is the system a production or test environment ?
 - ➔ Is the system on a new or stabilized software release ?
- A preventive maintenance strategy
 - ➔ Reduces unplanned outages or program failures
 - ➔ Provides optimal system performance and availability

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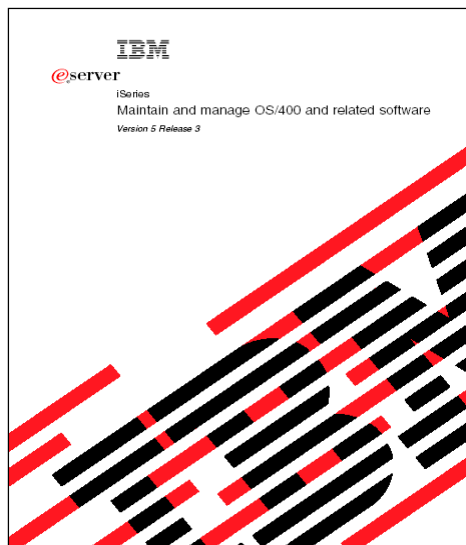
Maintenance Strategy - Sample

- Daily Activities
 - ➔ Run backup procedures
 - ➔ Order and apply individual fixes as needed
- Weekly Activities
 - ➔ Order and review Preventive System Planning (PSP)
 - ➔ Order and apply relevant HIPER fixes
 - ➔ Print and review hardware error log
- Monthly Activities
 - ➔ Order and apply HIPER and DB2 group fixes as needed
- Quarterly Activities
 - ➔ Order and apply current cumulative fix package (SF99vrn)
 - ➔ Order and apply group fixes (SF99nnn) as needed
 - ➔ Do a complete system save
 - ➔ Perform system cleanup functions

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References



Thank You !

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