

What You Need to Know to Do Successful IBM i Upgrades to 7.5 & 7.6



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In this session

- We are going to run through all the steps required to do an upgrade: from when you initially start thinking about the upgrade, what you need to do to prepare for the upgrade, issues & concerns to address before we start the upgrade, the actual upgrade, and then the verification and conversions afterward.
- A successful upgrade is one which the users don't know you worked all weekend, and they don't realize anything has changed until you start rolling out the new features and functions.

What we will cover...

- Map, starting, and documentation
- Analyze Object Conversion
- Release Mapping
- HMC, FSP, firmware, & IBM i
- Models
- Required PTFs, Resaves, and License Keys
- Image Catalogue & Preparing
- Right before the upgrade
- The Upgrade
- Verification
- Conversions & Afterwards

What we will cover...

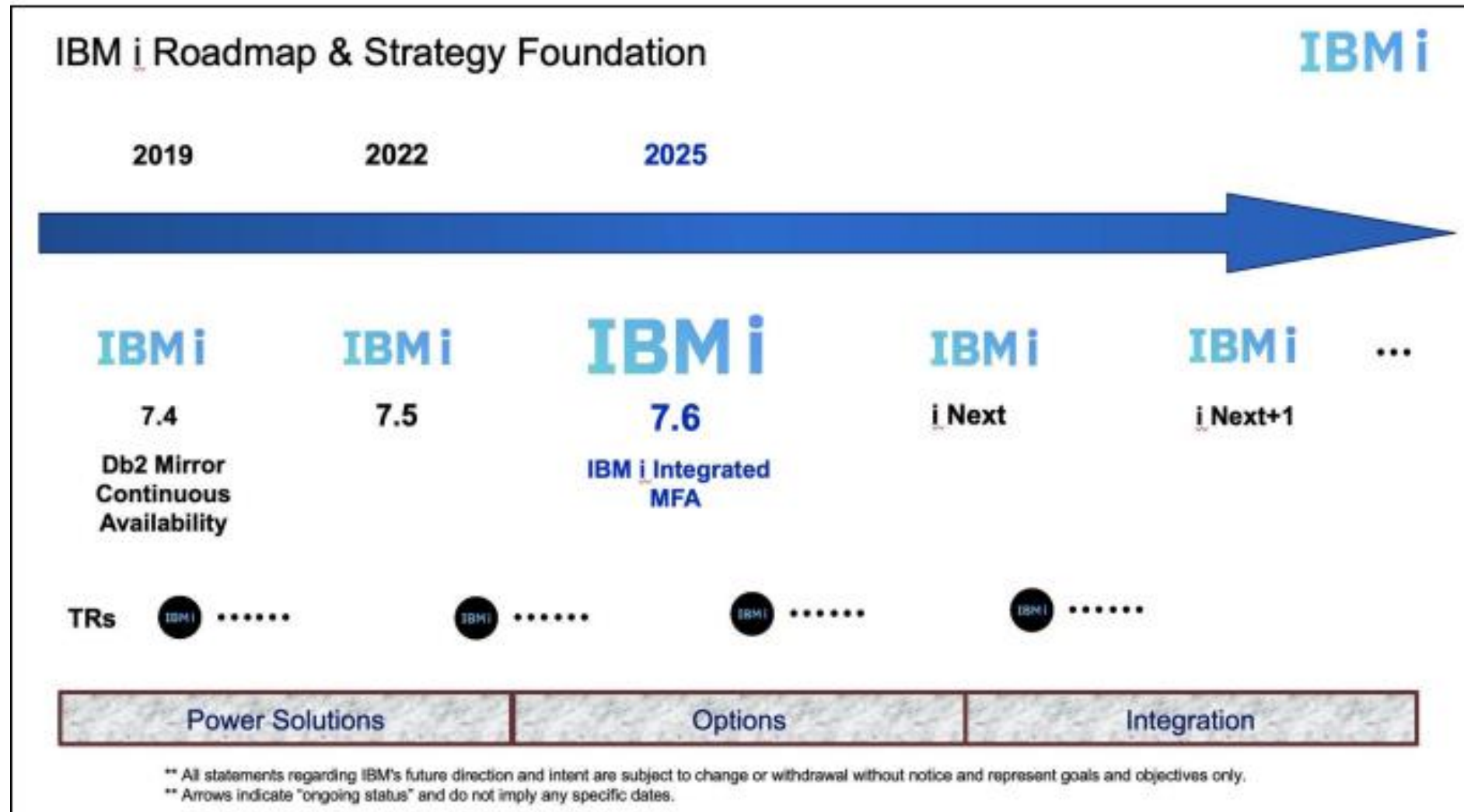
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Introduction - MAP

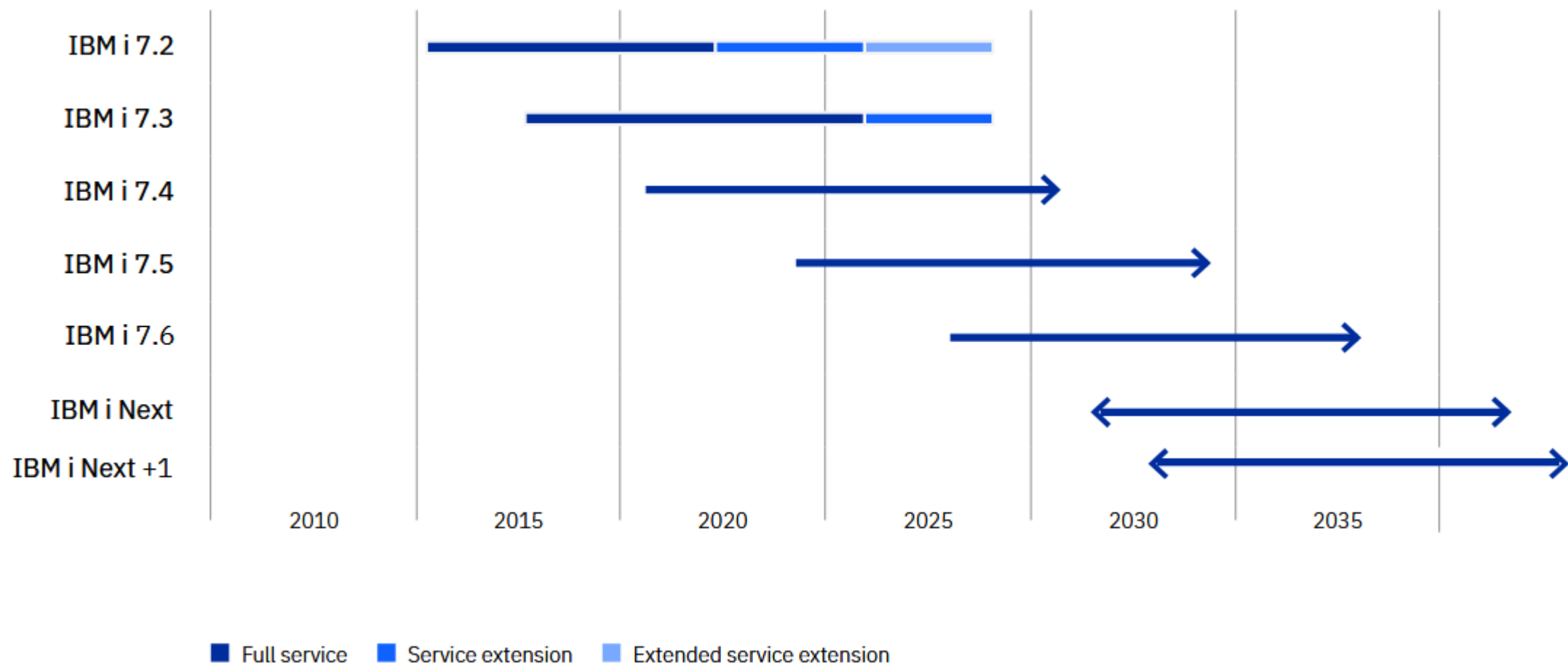
UNITED STATES OF AMERICA



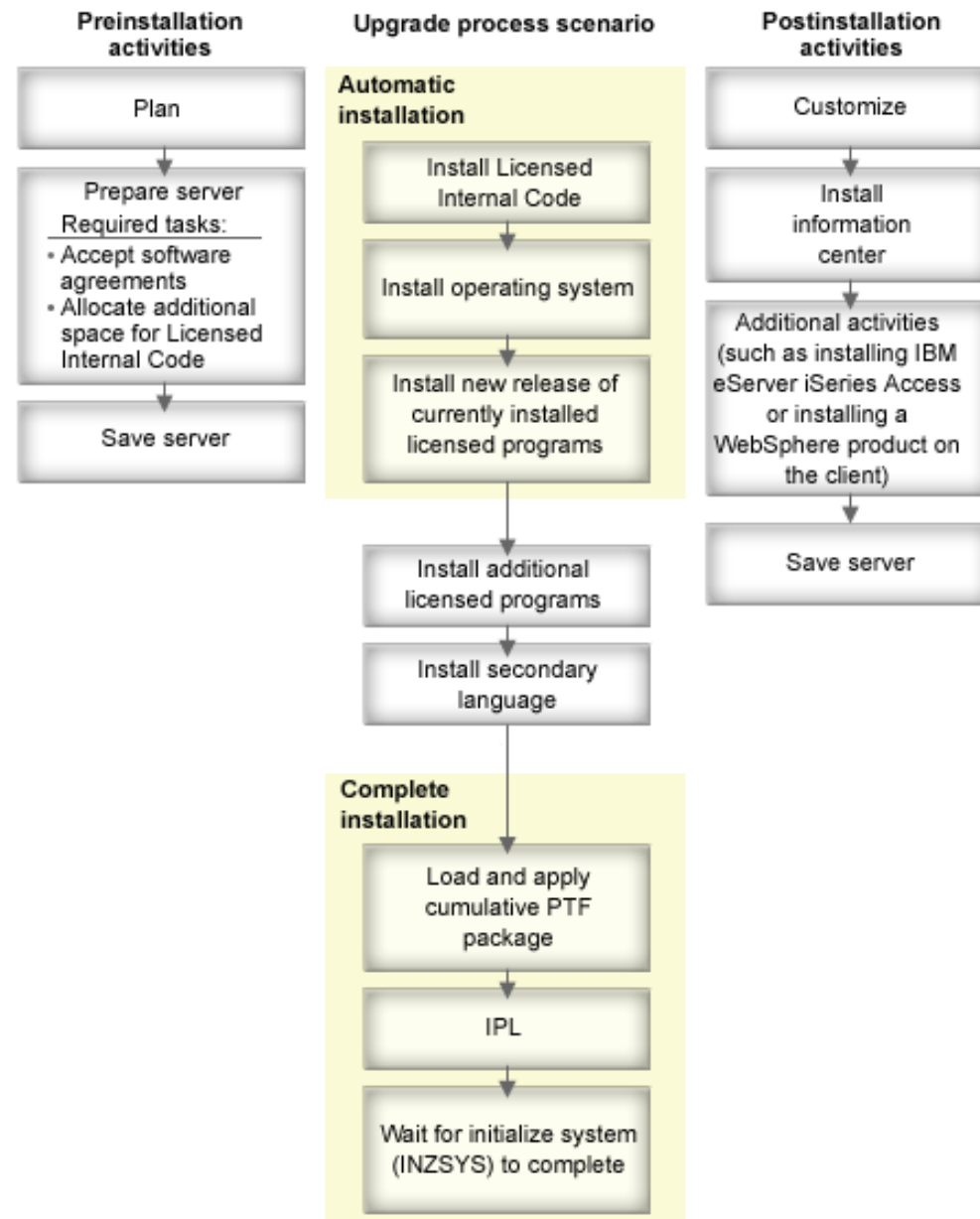
IBM i Roadmap



IBM i Release Roadmap



Upgrade Map



What you need before you start

- Have your Business Partner order 7.6, 7.5, 7.4, or 7.3 about 6 weeks before your planned upgrade date.
- Can also download software.
- License Keys.
- Order PSP PTF 7.1: SF98710, 7.2: SF98720, 7.3: SF98730, 7.4 SF98740, 7.5 SF98750, 7.6 SF98760
- i5/OS V5R4 CDs, 6.1, 7.1, 7.2, 7.3, 7.4, 7.5, & 7.6 on DVDs.
- Manuals.
- PTFs order about 2 weeks before the upgrade.
- Save Media for backups
- Approximately 6 hours of Dedicated system time.
- Bottle of Tums (Optional)

6.1: SC41-5120-10
7.5: SC41-5120-15

7.1: SC41-5120-11
7.6: SC41-5120-16

7.2: SC41-5120-12 7.3: SC41-5120-13

7.4: SC41-5120-14

IBM i
7.6

*IBM i and related software
Installing, upgrading, or deleting IBM i
and related software*



Manual – Memo to Users

https://www.ibm.com/docs/en/ssw_ibm_i_76/pdf/rzaq9.pdf



IBM i Memo to Users
7.6

Memo to Users

Example of a change in Memo to Users

Installing IBM i 7.6 over IBM i 7.4

If you are installing IBM i 7.6 over IBM i 7.4, you should also read the *IBM i Memo to Users* for IBM i 7.5. It contains incompatibility-related information about the new functions and enhancements incorporated in IBM i 7.5 and IBM i 7.6.

You can also view the IBM i 7.5 *IBM i Memo to Users* in IBM Docs under the IBM i 7.5 release :

<https://www.ibm.com/docs/en/i/7.5?topic=documentation-memo-users>

Discontinued support for certain software and hardware

It is important that, as a customer, you review and understand all new software release considerations.

This is especially true of discontinued support for selected software and hardware products or features. This information is contained within the IBM i announcement material. To get the most current information about discontinued products or features along with suggested replacements, go to "Planning to upgrade to IBM i 7.6" at: <https://www.ibm.com/support/pages/node/7176505>.

PTF numbers in this memorandum

Program temporary fix (PTF) numbers in this memorandum might have been superseded.

Memorandums for previous releases

How to access Memorandum to Users from previous releases.

You can view these documents on the IBM Documentation site by selecting the IBM i release:

<https://www.ibm.com/docs/en/i>

Prerequisite and related information

Use the [IBM Documentation site](#) as your starting point for looking up IBM i technical information.

The IBM Docs site contains information about important topics such as Java™(TM), TCP/IP, Web serving, secured networks, logical partitions, high availability, control language (CL) commands, system application programming interfaces (APIs), and IBM i Services. It also includes links to related IBM Redbooks® and Internet links to other IBM web sites such as the IBM home page.

With every new IBM Power® server hardware order, you receive the IBM i Access Client Solutions DVD.

IBM i 7.6 does not support IBM Power9 systems

IBM i 7.6 does not support Power9 processor-based systems.

See the following web page for a list of the IBM i Operating System levels that run on specific models of IBM Power Servers: <https://www.ibm.com/support/pages/node/6023368>.

Disk Device Type D910 is no longer supported on the IBM i

IBM i 7.6 does not support the Disk Device Type D910.

If you slip install IBM i 7.6 on your partition that has the Disk Device Type D910 in a traditional ASP, the partition will IPL to DST. However, the partition will not IPL past DST.

If you slip install IBM i 7.6 on your partition that has the Disk Device Type D910 in an Independent ASP, the IASP will not vary on.

Contact the IBM for a special key which permits the IBM i partition to continue to use the Disk Device Type D910 while you plan for the replacement of those devices.

IBM i clients who have existing Dell storage devices may be entitled to obtain a key to enable attachment with the IBM i D910 device driver. This key allows the existing device driver to attach Dell storage, but it does not include new enhancements. There is no guarantee that common IBM i storage or I/O path code will continue to work. Dell is responsible for any required changes if IBM i storage or I/O evolves in a way that becomes incompatible with Dell storage devices.

IBM i clients who purchase Dell storage for the first time after November 1, 2024 and require the IBM i D910 device driver for attachment are not entitled to the storage attachment key.

IBM i Tape Library Device virtualization support

The IBM i Tape Library Device Virtualization support is included in the IBM i 7.6 base, which could increase the number of tape device resources that are eligible to be shared with IBM i client partitions.

If there is already a Network Server Description (NWSD) defined on the server partition to share tape device resources, and the **ALWDEVRS** parameter is not used to restrict the number of tape device resources that can be shared with the client partitions; then grading from IBM i 7.4 to IBM i 7.6 may cause

Verify 3rd Party Software

Vendor

Product

Release

Libraries

Helpline

Serial#
Dependent

What we will cover...

Map, starting, and documentation

Release Mapping

HMC, FSP, firmware, & IBM I

Models

Required PTFs, Resaves, and License Keys

Image Catalogue & Preparing

Right before the upgrade

The Upgrade

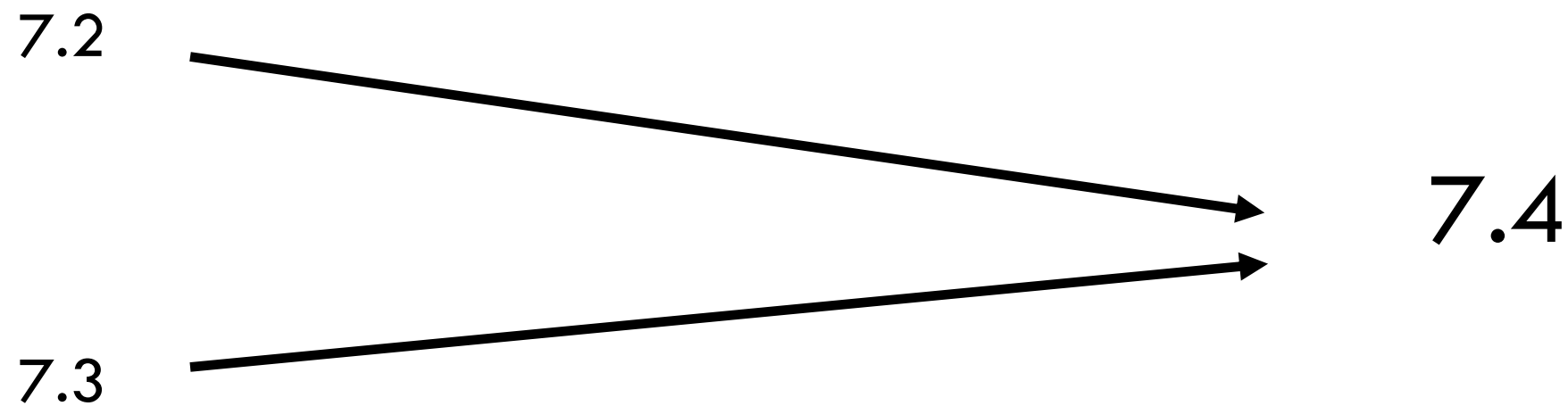
Verification

Conversions & Afterwards

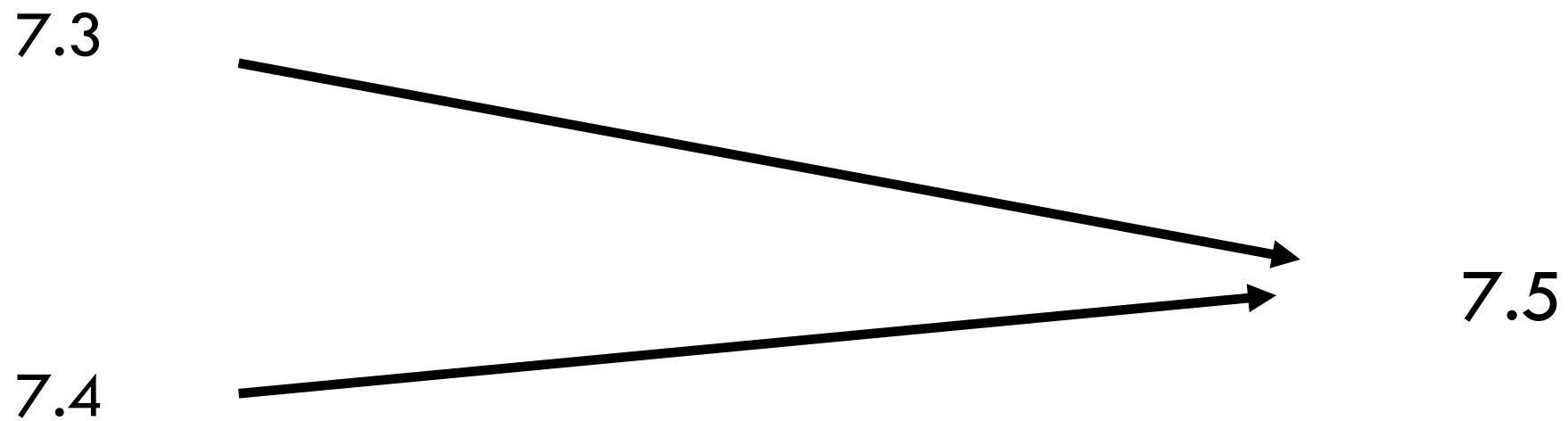
Planning

- Make sure you read both those manuals and understand the changes in the new release.
- PTF for Latest issues
- 6.1 – SF98610
- 7.2 - SF98710
- 7.2 - SF98720
- 7.3 – SF98730
- 7.4 – SF98740
- 7.5 – SF98750
- 7.6 – SF98760

Valid Upgrade paths IBM i 7.4



Valid Upgrade paths IBM i 7.5

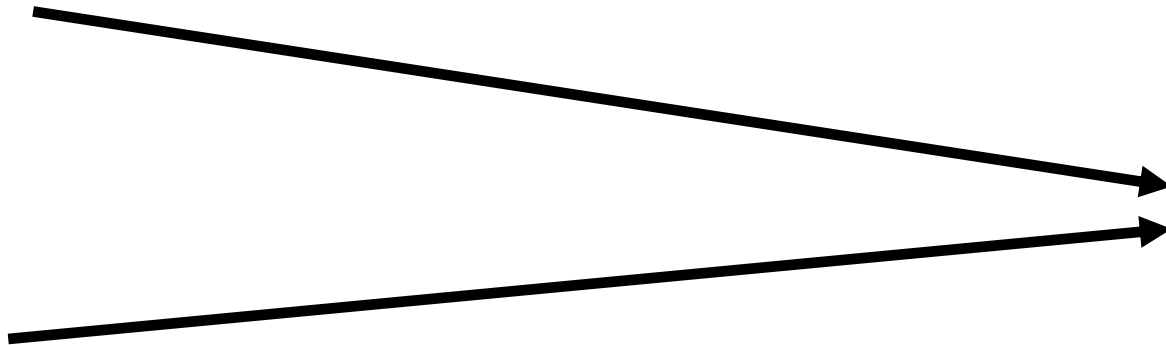


Valid Upgrade paths IBM i 7.6

7.4

7.5

7.6



Release life cycle

Release	Announce date*	GA date*	Announce End of Marketing date*	Effective End of Marketing date*	End of Program Support*	Program Support Extension Available*
V4R2	02/10/1998	02/27/1998	02/09/1999	02/25/2000	05/31/2000	01/31/2001
V4R3	09/01/1998	09/11/1998	02/15/2000	12/29/2000	01/31/2001	
V4R4	02/09/1999	05/21/1999	02/13/2001	05/31/2001	05/31/2001	11/30/2001
V4R5	05/22/2000	07/28/2000	02/12/2002	07/02/2002	07/31/2002	12/31/2002
V5R1	04/23/2001	05/25/2001	07/29/2003	11/21/2003	09/30/2005	
V5R2	06/04/2002	08/30/2002	02/08/2005	10/01/2005	04/30/2007	
V5R3	05/04/2004	06/11/2004	02/06/2007	01/04/2008	04/30/2009	04/30/2013
V5R4 (5.4.x)	01/31/2006	02/14/2006	01/27/2009	05/27/2011	09/30/2013 Note 2	09/30/2017
6.1.x	01/29/2008	03/21/2008	09/09/2014	12/09/2014	09/30/2015 Note 2	09/30/2019
7.1	04/13/2010	04/23/2010	04/11/2017	09/30/2017	04/30/2018	through 04/30/2024
7.2	04/28/2014	05/02/2014	09/10/2019	04/30/2020	04/30/2021	04/30/2026 Note 3
7.3	04/12/2016	04/15/2016	09/27/2022	04/28/2023	09/30/2023	09/30/2026 Note 4
7.4	04/23/2019	06/21/2019			Note 1	
7.5	05/03/2022	05/10/2022			Note 1	
7.6	04/08/2025	04/18/2025			Note 1	

* All dates are shown in MM/DD/YYYY format.

Skipping a release

- Going from 7.4 to 7.6 must read 7.5 memo to users
- What if you are at 7.2?
- What if you are at 6.1
- What if you are at earlier than V5R4 (get more tums)
- Note:
 - V5R3M5 of LIC uses V5R3M0 of i5/OS
 - V5R4M5 of LIC uses V5R4M0 of i5/OS
 - 6.1.1 of LIC uses 6.1 of IBM i

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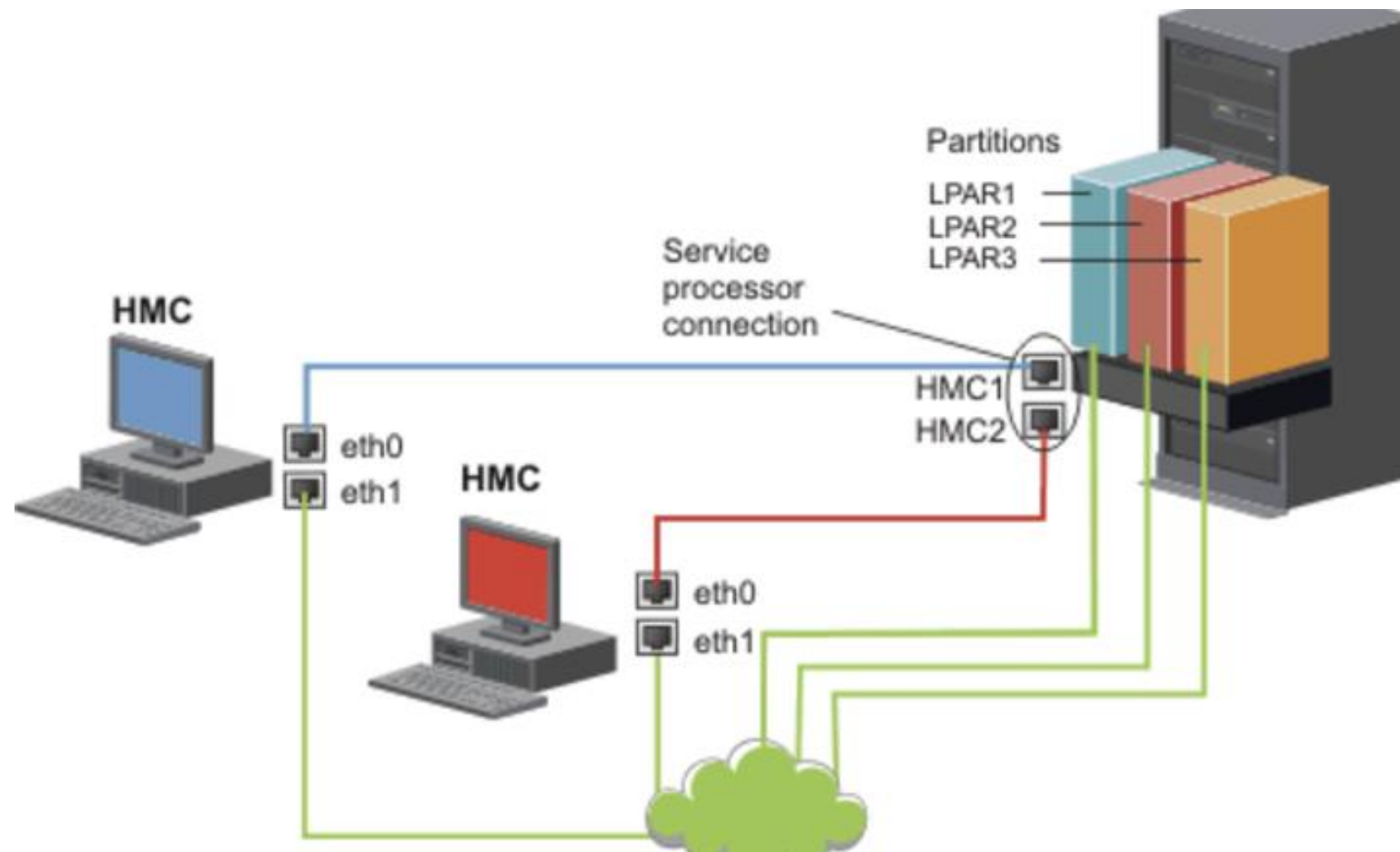
Right before the upgrade

The Upgrade

Verification

Conversions & Afterwards

HMC, FSP/eBMC, IBM i



Order of Upgrades

- Upgrade the HMC
- Upgrade the FSP/eBMC firmware
- Upgrade IBM i & LIC

Min. Firmware Requirements (1 of 2)

- 7.1.0
 - Power5 – SF240_332
 - Power6 - EM320_040, EL320_040, EH330_034
 - Power7 – AL710_043
 - Power8 – SV810_054
- 7.2.0
 - Power5 – Not Supported
 - Power6 - EM320_040, EL320_040, EH330_034, EA320_040
 - Power7 – AL710_043, AM710_065, AA710_083, AH720_064
 - Power8 – SV810_054
 - Power9 - VL910_073
- 7.3.0
 - Power5 & Power6 – Not Supported
 - Power7 – AL710_043, AM710_065, AA710_083, AH720_064
 - Power8 – SV810_054
 - Power9 - VL910_073



Min. Firmware Requirements (2 of 2)

- 7.4.0
 - Power7 – Not Supported
 - Power8 – SV810_054
 - Power9 - VL910_073
 - Power10 – ML1020_079
- 7.5.0
 - Power8 – Not Supported
 - Power9 - VL910_073
 - Power10 – ML1020_079
- 7.6.0
 - Power9 – Not Supported
 - Power10 – ML1060_107
 - Power11 – OB1110_082



HMC & Firmware Code Combinations Power 11

<https://www14.software.ibm.com/support/customer care/flrt/mtm>

Server MTM 9824-22A	System firmware
HMC and HMC Virtual Appliance	OB1110_082 OB1110_088
V11 R1 M1110 (1)	Supported

- Within six months of End of Service Pack Support
- End of Service Pack Support
- Reduced Fix support

HMC & Firmware Code Combinations Power 10

<https://www14.software.ibm.com/support/customer care/flrt/mtm>

Server MTM 9105-41B	System firmware			
HMC and HMC Virtual Appliance	ML1060_064	ML1050_052	ML1030_026	ML1020_079
	ML1060_067	ML1050_059	ML1030_030	ML1020_085
	ML1060_076	ML1050_070	ML1030_045	ML1020_089
	ML1060_088	ML1050_075	ML1030_058	ML1020_097
	ML1060_093	ML1050_078	ML1030_060	ML1020_102
	ML1060_107	ML1050_080	ML1030_065	ML1020_106
	ML1060_109	ML1050_087	ML1030_075	ML1020_112
	ML1060_117	ML1050_088	ML1030_082	ML1020_118
	ML1060_120	ML1050_089	ML1030_089	ML1020_120
	ML1060_129	ML1050_093	ML1030_091	
		ML1050_094	ML1030_093	
		ML1050_101	ML1030_094	
			ML1030_099	
V11 R1 M1110 (1)	Supported	Supported	Supported	Supported
V10 R3 M1060 V10 R3 M1061 V10 R3 M1062 (1) (2)	Supported	Supported	Supported	Supported
V10 R3 M1050 V10 R3 M1051 (1) (2)	Unsupported	Supported	Supported	Supported
V10 R2 M1030 V10 R2 M1031 V10 R2 M1040 V10 R2 M1041 V10 R2 M1042 V10 R2 M1043 (1) (2)	Unsupported	Unsupported	Supported	Supported
V10 R1 M1020 V10 R1 M1021	Unsupported	Unsupported	Unsupported	Supported

- Within six months of End of Service Pack Support
- End of Service Pack Support
- Reduced Fix support

Server MTM 9009-41G	System firmware	
HMC and HMC Virtual Appliance	VL950_045	VL941_035
	VL950_072	VL941_039
	VL950_075	VL941_045
	VL950_087	
	VL950_092	
	VL950_099	
	VL950_105	
	VL950_111	
	VL950_119	
	VL950_124	
	VL950_131	
	VL950_136	
	VL950_145	
	VL950_149	
	VL950_161	
	VL950_168	
	VL950_174	
	VL950_175	
	VL950_176	
	VL950_179	
	VL950_192	
V11 R1 M1110 (1)	Supported	Supported
V10 R3 M1050 V10 R3 M1051 V10 R3 M1060 V10 R3 M1061 V10 R3 M1062 (1) (2)	Supported	Supported
V10 R2 M1030 V10 R2 M1031 V10 R2 M1040 V10 R2 M1041 V10 R2 M1042 V10 R2 M1043 (1) (2)	Supported	Supported
V10 R1 M1010 V10 R1 M1011 V10 R1 M1020 V10 R1 M1021 V10 R1 M1022	Supported	Supported

HMC & Firmware Code Combinations Power 9

<https://www14.software.ibm.com/support/customercare/flrt/mtm>

- Yellow -Within 6 months End Service Pack Support
- Pink - End of Service Pack support
- Blue -Reduced Support

Server MTM 8286-41A	System firmware				
HMC and HMC Virtual Appliance	SV860_243	SV860_056	SV840_056	SV830_048	SV810_054
	SV860_245	SV860_063	SV840_079	SV830_068	SV810_058
	SV860_246	SV860_070	SV840_087	SV830_075	SV810_059
		SV860_082	SV840_104	SV830_086	SV810_061
		SV860_103	SV840_113	SV830_092	SV810_081
		SV860_109	SV840_118	SV830_097	SV810_087
		SV860_118	SV840_132	SV830_101	SV810_101
		SV860_127	SV840_139	SV830_106 (7)	SV810_108
		SV860_138	SV840_147		SV810_124
		SV860_160	SV840_168		SV810_126
		SV860_165	SV840_177		SV810_133
		SV860_180			SV810_146
		SV860_205			SV810_159
		SV860_212			
		SV860_215			
		SV860_226			
		SV860_231			
		SV860_234			
		SV860_236			
		SV860_240			
V10 R3 M1050 V10 R3 M1051 V10 R3 M1060 V10 R3 M1061 (1) (2)	Supported	Supported	Supported	Supported	Supported
V10 R2 M1030 V10 R2 M1031 V10 R2 M1040 V10 R2 M1041 V10 R2 M1042 V10 R2 M1043 (1) (2)	Supported	Supported	Supported	Supported	Supported
V10 R1 M1010 V10 R1 M1011 V10 R1 M1020 V10 R1 M1021 V10 R1 M1022 V10 R1 M1023 (1) (2)	Supported	Supported	Supported	Supported	Supported
V9 R2 M950 V9 R2 M951	Supported	Supported	Supported	Supported	Supported

HMC & Firmware Code Combinations Power 8

HMC & FSP Code Combinations

https://www.ibm.com/support/fixcentral/main/transform?xml=https://download.boulder.ibm.com/ibmdl/pub/software/server/firmware/sfw_fixSupportedCombos.xml&title=Supported+Combinations

HMC	p11 System Firmware	p10 System Firmware	p9 System Firmware	p8 System Firmware	p7 System Firmware
V11R1M1110	OK1110_069	MH1060_132	VM950_192		
	OK1110_066	MH1060_120	VM950_179		
	OF1110_088	MH1060_113	VM950_176		
	OF1110_082	MH1060_102	VM950_175		
	OB1110_088	MH1060_100	VM950_174		
	OB1110_082	MH1060_088	VM950_168		
		MH1060_078	VM950_165		
		MH1060_076	VM950_149		
		MH1060_069	VM950_145		
		MH1060_065	VM950_136		
		MH1060_048	VM950_131		
		MM1060_129	VM950_124		
		MM1060_120	VM950_119		
		MM1060_117	VM950_111		
		MM1060_109	VM950_105		
		MM1060_107	VM950_099		
		MM1060_093	VM950_092		
		MM1060_088	VM950_087		
		MM1060_076	VM950_075		
		MM1060_067	VM950_072		
		MM1060_064	VM950_045		
		ML1060_129	VL950_192		
		ML1060_120	VL950_179		
		ML1060_117	VL950_176		
		ML1060_109	VL950_175		
		ML1060_107	VL950_174		

DSPFMWSTS - Expired

```

                                     Display Firmware Status
-
Service partition . . . . . : No
Firmware update policy . . . . . : *HMC
Server IPL source . . . . . : Temporary
Firmware product ID/release . . . . . : 5733909 V1R1M0
Update access key expiration date . . . . . : 03/27/22

                                     ----Server firmware----
                                     Fix      PTF
Copy      pack      ID
*ACTIVE   VL950_072   MH01875
           FW950.10
*TEMP     VL950_072   MH01875
           FW950.10
*PERM     VL950_045   MH01866
           FW950.00

                                     Bottom

Press Enter to continue

F3=Exit   F5=Refresh   F12=Cancel
```

DSPFMWSTS

Display Firmware Status

Service partition : No
Firmware update policy : *HMC
Server IPL source : Permanent
Firmware product ID/release : 5733910 V1R1M0
Update access key expiration date : 05/18/28

----Server firmware----

Copy	Fix pack	PTF ID
*ACTIVE	ML1060_088 FW1060.20	MH03690
*TEMP	ML1060_088 FW1060.20	MH03690
*PERM	ML1060_088 FW1060.20	MH03690

Bottom

Press Enter to continue

F3=Exit F5=Refresh F12=Cancel

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IBM i System Support – Details about Supported Releases



Servers	IBM i 6.1 ₁	IBM i 7.1 ₁	IBM i 7.2 ₁	IBM i 7.3 ₁	IBM i 7.4	IBM i 7.5	IBM i 7.6
Power10 S1012, S1014, S1022 (requires VIOS, except 2x4-core config), S1024, E1080				✓ ²	✓	✓	✓
Power9 S914, S922 (8, 10, 11 cores all require VIOS), H922 (requires VIOS), S924, H924, E980 S922 1-core (no IBM i 7.1, single native I/O partition only)		✓	✓	✓	✓	✓	
Power8 S814, S822 (requires VIOS), S824, E870, E870C, E880, E880C S812 (no IBM i 7.1, single native I/O partition only)		✓	✓	✓	✓		
Power7/7+ 710, 720, 730, 740, 750 (requires VIOS), 760 (requires VIOS), 770, 780, 795	✓	✓	✓	✓			
Power7 BladeCenter P5706/701/702/703/704 (all require VIOS) Power7/7+ Flex p260/270/460 (all require VIOS)	✓	✓	✓				
Power6+ 520, 550, 560, 570, JS23/43 (requires VIOS) Power6 520, 550, 570, 595, JS12/22 (requires VIOS)	✓	✓	✓ ³				
Power5/5+ 515, 520, 525, 550, 570, 595	✓	✓					
800, 810, 825, 870, 890	✓						

1 – IBM i 6.1, 7.1, 7.2, and 7.3: refer to [IBM i Release Lifecycle](#) for extended support information

2 – S1012 does not have IBM i 7.3 support

3 – No IOP or HSL support

IBM i: Current as of 2023-05-01

Power11 – IBM i 7.6, 7.5, and 7.4

Models **Not** supported at Release B6000423

- V5R4: 150, 170, 250, 400, 40S, 436, 53S, 500, 510, 530, 50S, 600, 620, 640, 650, 720, 730, 740, S10, S20, S30, S40, SB1
- V6R1: 270, 820, 830, 840, SB2, SB3 or earlier members of the iSeries family.
- 7.1: 800, 810, 825, 870, and 890.
- 7.2: POWER5 – 9405-520, 9406-520, 525, 550, 570, 595, and 9407-515. PLUS POWER6 with POWER5 Draws
- 7.3: All POWER6, POWER7 Blades
- 7.4: All POWER7 & POWER7+
- 7.5: All Power8
- 7.6: All Power9



Caution

IBM 7.3 issues that need to be addressed

- 1) POWER6**
- 2) LAN Console**
- 3) Increase License Internal Code Space**
- 4) Required PTFs**
- 5) IBM i NetServer Shared Printer Changes**
- 6) Secure sockets Layer (SSL) and Transport Layer Security (TLS) Changes**
- 7) Supported Versions Of:**
 - 7.1) Java**
 - 7.2) Domino**
 - 7.3) WebSphere**



IBM 7.4 issues that need to be addressed

1. No POWER7
2. Increase License Internal Code
3. Required PTFs
4. LAN Console: ACS or HMC
5. Secure Sockets Layer (SSL) & Transport Layer Security (TLS) Changes
 - a) Enabled TLS1.3
 - b) Disabled TLS 1.1 & 1.0
 - c) SSL 2.0 Can't be turned on.
6. NetServer Printer Shares – SMBv3 default
7. Supported Versions of:
 71. Java8, Java11, and Java17
 72. Domino 10.0.0.1+
 73. WebSphere 8.5.5.16+ or 9.0.0.11+
 74. MQ 9.0.0.7+ or 9.1.0.3+



IBM 7.5 issues that need to be addressed

1. No POWER8
2. Increase License Internal Code(from 7.3)
3. Required PTFs
4. LAN Console: ACS or HMC
 1. No more 11111111 or 2222222
5. Secure Sockets Layer (SSL) & Transport Layer Security (TLS) Changes
 - a) Enabled TLS1.3
 - b) Disabled TLS 1.1 & 1.0
 - c) SSL 2.0 Can't be turned on.
6. NetServer Printer Shares – SMBv3 default
7. Supported Versions of:
 71. Java8, Java 11, & Java 17
 72. Domino 10 via HCL
 73. WebSphere 9.0.5.11+ PRIOR to Upgrading
 74. MQ 9.2.0.6 & 9.3.0



IBM 7.6 issues that need to be addressed

1. No POWER9
2. Increase License Internal Code(from 7.3)
3. Required PTFs
4. Changes to the 1940 – 2039 Date Range for 2 digit years
5. LAN Console: ACS or HMC
 1. No more 11111111 or 2222222
6. Secure Sockets Layer (SSL) & Transport Layer Security (TLS) Changes
 - a) Enabled TLS1.3
7. NetServer Printer Shares – SMBv3 default
8. **Disk Device type D910 (Dell) not supported without key**
9. Change Default DST Password for QSECOFR before upgrade



IBM 7.6 issues that need to be addressed

- 1 1. The IBM i operating system (5770-SS1) and the Licensed Program Products (LPPs) for IBM i will no longer be translated to the Arabic, Czech, Danish, Dutch, Finnish, Hungarian, Icelandic, Norwegian, Polish, Portuguese, Russian, Swedish and Turkish languages.
- 1 2. Six new IBM supplied user profiles in IBM i 7.6: QPGMR_NC, QSECOFR_NC, QSYSOPR_NC, and QUSER_NC. These new profiles have the same privileges as their counterpart user profiles. Plus, QRCL (Remote Code load server) and QRSC (Remote Code load).
- 1 3. Journal standby state, set by specifying JRNSTATE(*STANDBY) on the Change Journal (CHGJRN) command, will be removed in a future release.
- 1 4. Software support for the Binary Synchronous (BSC) protocol, Layer 2 Tunneling Protocol (L2TP), and Point-to-Point Protocol (PPP) has been removed.
- 1 5. Removed servers: BOOTP, DHCP.DNS, MGTC, QOS, and RouteD.



IBM 7.6 issues that need to be addressed

16. Supported Versions of:

- a) Java8 & Java 19, Default is Java17. Java 21 in Progress
- b) Domino 10 via HCL
- c) WebSphere 9.0.5.22+
- d) WebSphere Liberty 24.0.0.12
- e) MQ 9.2.0.6 & 9.3.0



Windows Server Message Block (SMB)

Defaults

- 7.2 is 1
- 7.3 is 2
- 7.4 & 7.5 is 3

IBM i Version	SMBv1 Support	SMBv2 Support	SMBv3 Support
7.4, 7.5, & 7.6	✓	✓	✓
7.3	✓	✓	
7.2 w/PTFs	✓	✓	
7.2 GA	✓		
7.1	✓		
6.1	✓		
V5R4	✓		



CALL QZLSMAINT PARM('40' '0')

WebSphere Compatibility

Not supported (No) = Technical support is no longer available from IBM without a special extended support contract.

Best effort support = As long as a valid support contract exists for the IBM i OS VRM, clients can create IBM Support cases and IBM Support will assist the best they can. Usage and Known Defect only. No defect or development support is available.

Full support (Yes)= As long as a valid support contract exists for the IBM i OS VRM, defect and development support is available.

	<u>IBM i 6.1 (No Extended Support)</u>	<u>IBM i 7.1 (w/ valid service extension contract)</u>	<u>IBM i 7.2 (w/ valid service extension contract)</u>	<u>IBM i 7.3</u>	<u>IBM i 7.4</u>	<u>IBM i 7.5</u>
WAS v7.0.x Base and ND editions	No	No	N/A	N/A	N/A	N/A
WAS v8.0.x Express edition	No	Best effort support	Best effort support 8.0.0.8 and later	N/A	N/A	N/A
WAS v8.0.x Base and ND editions	No	No	No	N/A	N/A	N/A
WAS v8.5.x Express edition	No	Best effort support	Best effort support 8.5.5.2 and later JDK 8.0 only	Yes 8.5.5.10 and later JDK 8.0 only	Yes 8.5.5.16 and later JDK 8.0 only	N/A
WAS v8.5.x Base and ND editions	No	Best effort support	Best effort support 8.5.5.2 and later JDK 8.0 only	Yes 8.5.5.10 and later JDK 8.0 only	Yes 8.5.5.16 and later JDK 8.0 only	N/A
WAS v9.0.x Base and ND editions	N/A	Best effort support	Best effort support	Yes	Yes	Yes 9.0.5.11 and later

Protocol Compatibility by OS

- 7.6 – TLS 1.3, TLS 1.2
- 7.5 – TLS 1.3, TLS 1.2
- 7.4 – TLS 1.3, TLS 1.2
- 7.3 – TLS 1.3, TLS 1.2, TLS 1.1, TLS 1.0
- 7.2 – TLS 1.2, TLS 1.1, TLS 1.0
- 7.1 – TLS 1.0
- Protocol Defaults
- If PTFs current, expect broken protocols at 7.3 and below
- If PTFs NOT current, expect broken protocols at 7.3 and below
 - Except way worse
 - i.e., 7.1 with SSLv2, SSLv3

IBM i support for Collaboration Software

	IBM i 7.3	IBM i 7.2	IBM i 7.1 ⁽⁴⁾
Domino 10.0.1	X	X	Not supported
Domino 9.0.1	X⁽¹⁾	X	X
Domino 9.0	Not supported	Not supported	X
Connections 5.0	Not supported	X	X
Traveler 10.0.1	X	X	Not supported
Traveler 9.0.1	X	X	X
Traveler 9.0	Not supported	Not supported	X
Sametime 9.0.1	X⁽²⁾	X	X
Sametime 9.0, 9.0 HF1	Not supported	X⁽³⁾	X
IBM Enterprise Integrator 9.0.1	Not supported	X	X
IBM Enterprise Integrator 9.0	Not supported	Not supported	X

Notes:

- 1) Upgrade to IBM Domino 9.0.1 Fix Pack 6 to support IBM i 7.3.
- 2) Upgrade to IBM Sametime 9.0.1 to support IBM i 7.3.
- 3) Upgrade to IBM Sametime 9.0 HF1 to support IBM i 7.2.
- 4) IBM i 7.1 was end of service from Sept.2018, we recommend customer move to 7.2 or higher when plan to use Traveler or Domino 10.0.1.

Assure MIMIX & OS Compatibility

Assure MIMIX & Operating System Compatibility Matrices

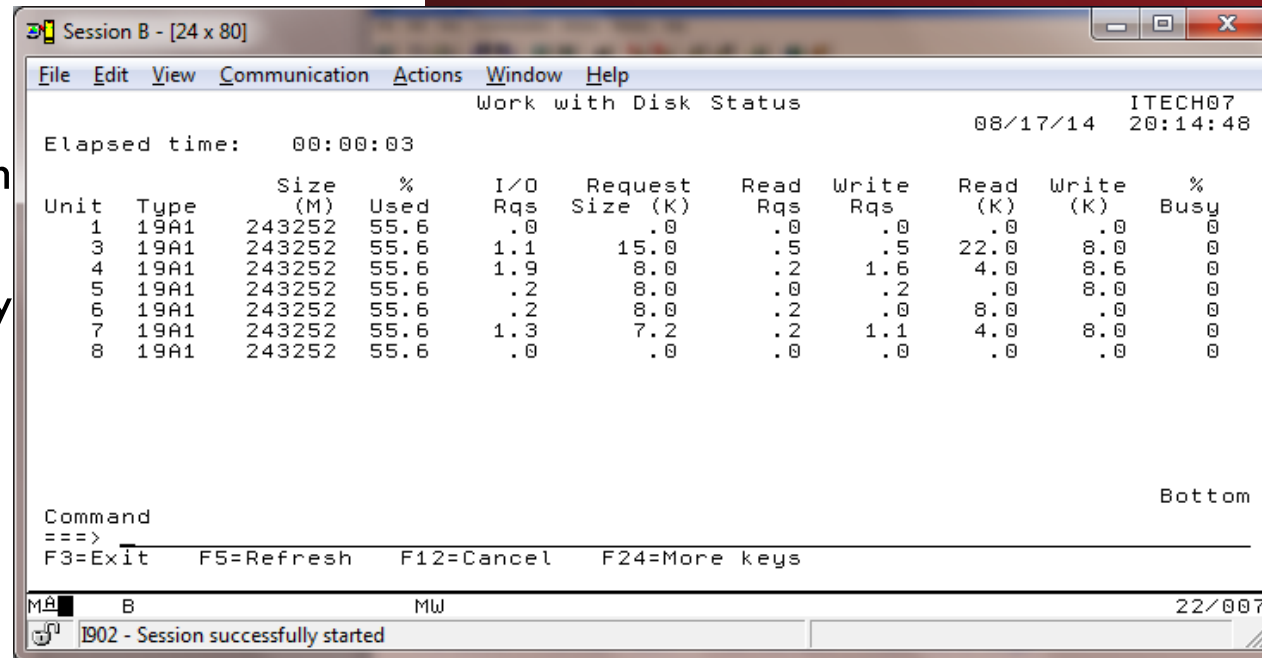
Revised: March 13, 2024

Assure MIMIX & IBM i

Assure MIMIX Release	IBM i Operating System Release Level ¹							
	7.5	7.4	7.3	7.2	7.1	6.1	V5R4	V5R3
Assure MIMIX 10.0	Yes ²	Yes	Yes	Yes ³	No	No	No	No
Assure MIMIX 9.0	Yes ⁴	Yes ⁵	Yes	Yes	Yes	No	No	No
Assure MIMIX 8.1	No	Yes ⁶	Yes ⁷	Yes	Yes	Yes	No	No
MIMIX 8.0	No	No	Yes ⁸	Yes	Yes	Yes	No	No
MIMIX 7.1	No	No	No	Yes ⁹	Yes	Yes	Yes	No
MIMIX 7.0	No	No	No	No	Yes	Yes	Yes	No
MIMIX HA 6.0	No	No	No	No	Yes ^{10,11}	Yes ¹²	Yes	No
MIMIX 5.0	No	No	No	No	No	Yes ^{13,14}	Yes ¹⁵	Yes
MIMIX V4R4	No	No	No	No	No	No	Yes ¹⁶	Yes ¹⁷

Load Source > 35GB for 7.1, 7.2, 7.3, 7.4, 7.5, and 7.6

- Minimum of 35 GB for 520-byte sectors (DS8000, virtual disks with VIOS as server)
- Minimum of 41 GB (to get 35 GB useable space) for 512-byte sectors (SVC, Storwize, virtual disks with VIOS VSCSI or IBM i as server)
- Minimum of 70 GB for Native-attached SAS/SCSI (Both 520-byte or 4K sectors)
- Disk Type D910 (Dell) not supported at 7.6 without key



Unit	Type	Size (M)	% Used	I/O Rqs	Request Size (K)	Read Rqs	Write Rqs	Read (K)	Write (K)	% Busy
1	19A1	243252	55.6	.0	.0	.0	.0	.0	.0	0
3	19A1	243252	55.6	1.1	15.0	.5	.5	22.0	8.0	0
4	19A1	243252	55.6	1.9	8.0	.2	1.6	4.0	8.6	0
5	19A1	243252	55.6	.2	8.0	.0	.2	.0	8.0	0
6	19A1	243252	55.6	.2	8.0	.2	.0	8.0	.0	0
7	19A1	243252	55.6	1.3	7.2	.2	1.1	4.0	8.0	0
8	19A1	243252	55.6	.0	.0	.0	.0	.0	.0	0

If Using Operations Console

- Upgrade Operations console before the IBM i upgrade using the CD/DVD IBM i Access Setup and Operations.
- Correct Card location in CEC
- DST Userid of 11111111 & 22222222 for connection of Ops Console removed during the upgrade to 7.5
- Direct attach NOT Supported in 7.1. Convert to LAN Console BEFORE upgrading.
- Twinax not supported at 7.2.
- For 7.3/7.4/7.5/7.6 IBM i Access Console -> Access Client Solutions BEFORE upgrading.



IBM 7.3 will **NOT** support

- Websphere Application Server V8.0, Upgrade to V8.5 (fix pack 9 which is 8.5.5.9) or later.
- WebSphere MQ version 7.0.1 and lower is not supported. Upgrade to 7.1.0.7 or 8.0.0.4. or 9.0 or 9.1
- Java 6.0 (option 11 & 12) are no longer supported. The default JVM is now Java 8.0 32bit (option 16). Just JVM 7, 8, & 11.



IBM 7.4 will **NOT** support

- Websphere Application Server V8.0, Upgrade to V8.5 (fix pack 15 which is 8.5.5.15) or V9.0 (fix pack 11 which is 9.0.0.11).
- WebSphere MQ version 8 and lower is not supported. Upgrade to 9.0.0.7 or 9.1.0.3
- Java 7.0 is no longer supported. Java SE 8 32 bit (5770-JV1 option 16), Java SE 8 64 bit (5770-JV1 option 17) are required to be installed on IBM i 7.4. The default JVM is now Java 8.0 64bit (option 17). Java 11 also supported



IBM 7.5 will **NOT** support

- Websphere Application Server V8.0 nor V8.5 Upgrade to V9.0.5.11 (fix pack 11).
- WebSphere MQ version 9.1 and lower is not supported. Upgrade to 9.2.0.6 or 9.3
- Java 7, upgrade to Java 8 (option 16 or 17) or 11 (option 19).
- Samba RPM package, for SMB use QNTC or NetServer.
- WebEnablement 5722-WE2 use WE3.
- 5733-XT2 not supported, existing ILE code will continue to work, but new supported version of XML Parsing.



IBM 7.6 will **NOT** support

- Websphere Application Server V8.0 nor V8.5 Upgrade to V9.0.5.22 (fix pack 22).
- IBM Installation Manager 1.9.3 or newer.
- WebSphere MQ version 9.1 and lower is not supported. Upgrade to 9.2.0.6 or 9.3
- Java 7 nor Java 11, upgrade to Java 8 (opt 16 AND 17), 17 (opt 20), 21 (Opt 21), 25 (Opt 22)
- DB2 WebQuery (5733-WQX)
- IBM I Fax support 5798-FAX & Universal Management Enablement 577-UME withdrawn



IBM 7.6 will **NOT** support 5770-BR1

- Install BRMS 5770-BR1 PTFS
 - 7.5 SJ01879
 - 7.4 SJ01877
- No user created LFs on BRMS files in QUSRB RM
- Remove BRMS SQL Services to prevent dependency issues in QUSRB RM
 - Call QBRM/Q1AOLD PARM ('INSTALL ' 'RMVSQLSERV' 'N' '00')
- Both 5770-BR1 & BR2 can't be installed at the same time
- Delete 5770-BR1, note that QUSRB RM is not deleted.



IBM 7.5 Last release to support



IBM i functions	Packaging (LPP, Installable Option, Menu Option)	Replacement product information
Bootstrap Protocol (BOOTP) server	Function in IBM i (5770-SS1) base	A replacement function is the Internet Systems Consortium's (ISC) DHCP Server called Kea. This is not the only replacement product available. Other companies may also offer function which provides a DHCP server.
Native Dynamic Host Configuration Protocol (DHCP) server	Function in IBM i (5770-SS1) base	A replacement function is the Internet Systems Consortium's (ISC) DHCP Server called Kea. This is not the only replacement product available. Other companies may also offer function which provides a DHCP server.
Remote Authentication Dial In User Service (RADIUS)	Function in IBM i (5770-SS1) base	None
Domain Name System (DNS) Server	Function in IBM i (5770-SS1) option 31	There are many external DNS servers available in the marketplace that can be leveraged.
Route Daemon (Routed)	Function in IBM i (5770-SS1) base	IBM i's OMPROUTED is an alternative to RouteD. OMPROUTED supports RIP, RIP next generation (RIPng) for Internet Protocol version 6 (IPv6), and Open Shortest Path First (OSPF) routing protocols.
Virtual Private Network (VPN) Internet Key Exchange version 1 (IKEv1) protocol	Function in IBM i (5770-SS1) base	IBM i's more modern and secure replacement is VPN IKEv2 protocol.
IP Payload Compression protocol (IPComp)	Function in IBM i (5770-SS1) base	IPComp is supported with IKEv1 but not IKEv2. Because IKEv1 is being withdrawn, IPComp is also being withdrawn.
Quality of Service (QoS) Server	Function in IBM i (5770-SS1) base	None

IBM 7.5 Last release to support



IBM i functions	Packaging (LPP, Installable Option, Menu Option)	Replacement product information
FAX (IBM Facsimile Support for i)	5798-FAX	Replacement Fax solutions include these products: - CloudFax from International Presence - FastFax from Fresche Solutions - BlueSeries Fax from System & Method A/S These are not the only replacement products available. Other companies may also offer function which provides a Fax solution.
FRCA (Fast Response Cache Accelerator) for HTTP Server	Function in IBM i (5770-SS1) base	The IBM HTTP Server for i (Powered by Apache) has several built-in caching options.
Performance Graphics	Performance Tools for i (5770-PT1) option 9	Navigator for i
Performance Advisor	Performance Tools for i (5770-PT1) option 10	None
Graphical Data Display Manager (GDDM)	IBM i (5770-SS1) option 14	None
OptiConnect	IBM i (5770-SS1) option 23	The main use of OptiConnect is for ObjectConnect (another installable option of 5770-SS1) to run over virtual OptiConnect. Running ObjectConnect over IP with TLS (Transport Layer Security) is an alternative.
Binary Synchronous Communications (Bisync) protocol	Function in IBM i (5770-SS1) base	None
Point to Point Protocol (PPP) and Layer 2 Tunneling Protocol (L2TP)	Function in IBM i (5770-SS1) base	None

IBM 7.5 Last release to support



IBM i functions	Packaging (LPP, Installable Option, Menu Option)	Replacement product information
Rootstrap Protocol (ROOTP)	Function in IBM i (5770)	A replacement function is the Internet Systems Consortium's (ISC) DHCP.
IBM Technology for Java 11 64bit IBM Semeru Runtime Certified Edition	(5770-JV1) option 19	Use supported Java releases Java 17 or later.
IBM Rational Development Studio for i Application Development Toolset is withdrawing selected tools: - Report Layout Utility (RLU) - Screen Design Aid (SDA) - File Compare and Merge Utility (FCMU) - Advanced Printer Function (APF) - Character Generator Utility (CGU) - Data File Utility (DFU)	Rational Development Studio for i (5770-WDS) option 21	There are several options for replacement, including Rational Developer for i, Code for i, and others.
Business Graphics Utility	5761-DS2	There are several options for replacement, including Rational Developer for i, Code for i, and others.
IBM Technology for Java 11 64bit (Option 19 of product 5770-JV1)	Installable option in product JV1	Use supported Java releases Java 17 or later.
Management Central	Installed as part of the operating system	The only access to Management Central is through Access for Windows which was removed from support in April 2019.

What we will cover...

Map, starting, and documentation

Release Mapping

HMC, FSP, firmware, & IBM i

Models

Required PTFs, Resaves, and License Keys

Image Catalogue & Preparing

Right before the upgrade

The Upgrade

Verification

Conversions & Afterwards

Planning

Verify what you have received is all the software you require.

Already covered Server levels FSP
Code

You will require loading some PTFs,
Check to see if IPL is required.

List of Required PTFs before upgrading

- Here is the PTF list for going to:
 - V5R3 - APAR II14149 V5R4 – APAR II14131
 - 6.1 - APAR II14310 7.1 – APAR II14482
- 7.2 <https://www.ibm.com/support/pages/required-ptfs-upgrading-ibm-i-72>
- 7.3 <https://www.ibm.com/support/pages/required-ptfs-upgrading-ibm-i-73>
- 7.4 <https://www.ibm.com/support/pages/required-ptfs-upgrading-ibm-i-74>
- 7.5 <https://www.ibm.com/support/pages/required-ptfs-upgrading-ibm-i-75>
- 7.6 <https://www.ibm.com/support/pages/required-ptfs-upgrading-ibm-i-76-0>

SF98vrm – READ IT !

18. 08 May 2025 PROBLEM: (DT436794) Licensed Program = 5733SC1
Security
USERS AFFECTED: All IBM i operating system users.
RECOMMENDATION: Apply PTF SJ05440 for IBM i 7.6.
17. 07 May 2025 PROBLEM: (DT436765) Licensed Program = 5770999
Security
USERS AFFECTED: All IBM i operating system users.
RECOMMENDATION: Apply LIC PTF MJ05418 for IBM i 7.6.
16. 07 May 2025 PROBLEM: (DT434388) Licensed Program = 5770999
Security
USERS AFFECTED: All IBM i operating system users.
RECOMMENDATION: Apply LIC PTF MJ05415 for IBM i 7.6.
15. 05 May 2025 PROBLEM: (DT435942) Licensed Program = 5770SS1
Unpredictable Corruption
USERS AFFECTED: All IBM i operating system users.
RECOMMENDATION: Apply PTF SJ05444 for IBM i 7.6.
14. 01 May 2025 PROBLEM: (DT431972) Licensed Program = 5770999
Crash/Hang Requiring an IPL to Recover
USERS AFFECTED: All IBM i operating system users.
RECOMMENDATION: Apply LIC PTF MJ04611 for IBM i 7.6.
13. 23 Apr 2025 PROBLEM: (DT436425) Licensed Program = 5770SS1
Incorrect Output Causes a Severe Problem
USERS AFFECTED: All IBM i operating system users.
RECOMMENDATION: Apply PTF SJ05355 for IBM i 7.6.
12. 21 Apr 2025 PROBLEM: (DT435265) Licensed Program = 5770999
Crash/Hang Requiring an IPL to Recover
USERS AFFECTED: All IBM i operating system System Asp
Encryption users
RECOMMENDATION: Apply LIC PTF MJ04940 for IBM i 7.6.



IBM i Resave (ReSpins)

I_BASE_01 – Version

Resave Identifier	LIC	OS	
	Marker PTF (999)	Marker PTF (SS1)	
RS B (LIC 7.6.0) / RS 760-00	RE25161	AP25055	Power 11
RS G (LIC 7.5.0) / RS 750-00	RE25168	AP22025	(Has TR-6) Power11
RS R (LIC 7.4.0) / RS 740-00	RE25164	AP19119	(Has TR-12) Power11
RS R (LIC 7.3.0) / RS 730-10	RE22283	AP19143	(Has TR-13,TR11P10 Ent)
RS Q (LIC 7.2.0) / RS 720-00	RE20077	AP14056	(Has TR-9+) P9 (TR8)
RS S (LIC 7.1.0) / RS 710-10	RE16082	AP11067	(Has TR-11)
RS M (LIC 6.1.1) / RS 610-10(XPF)	RE63274	AP09202	
RS G (LIC 6.1.0) / RS 610-10(XPF)	RE09202	AP09202	
RS G (LIC 5.4.0) / RS 540-30(XPF)	RE08281	AP07100	
RS F (LIC 5.4.5) / RS 540-30(XPF)	RE59055	AP07100	
RS F (LIC 5.3.5) / RS 530-10(XPF)	RE57131	AP05202	



Tip

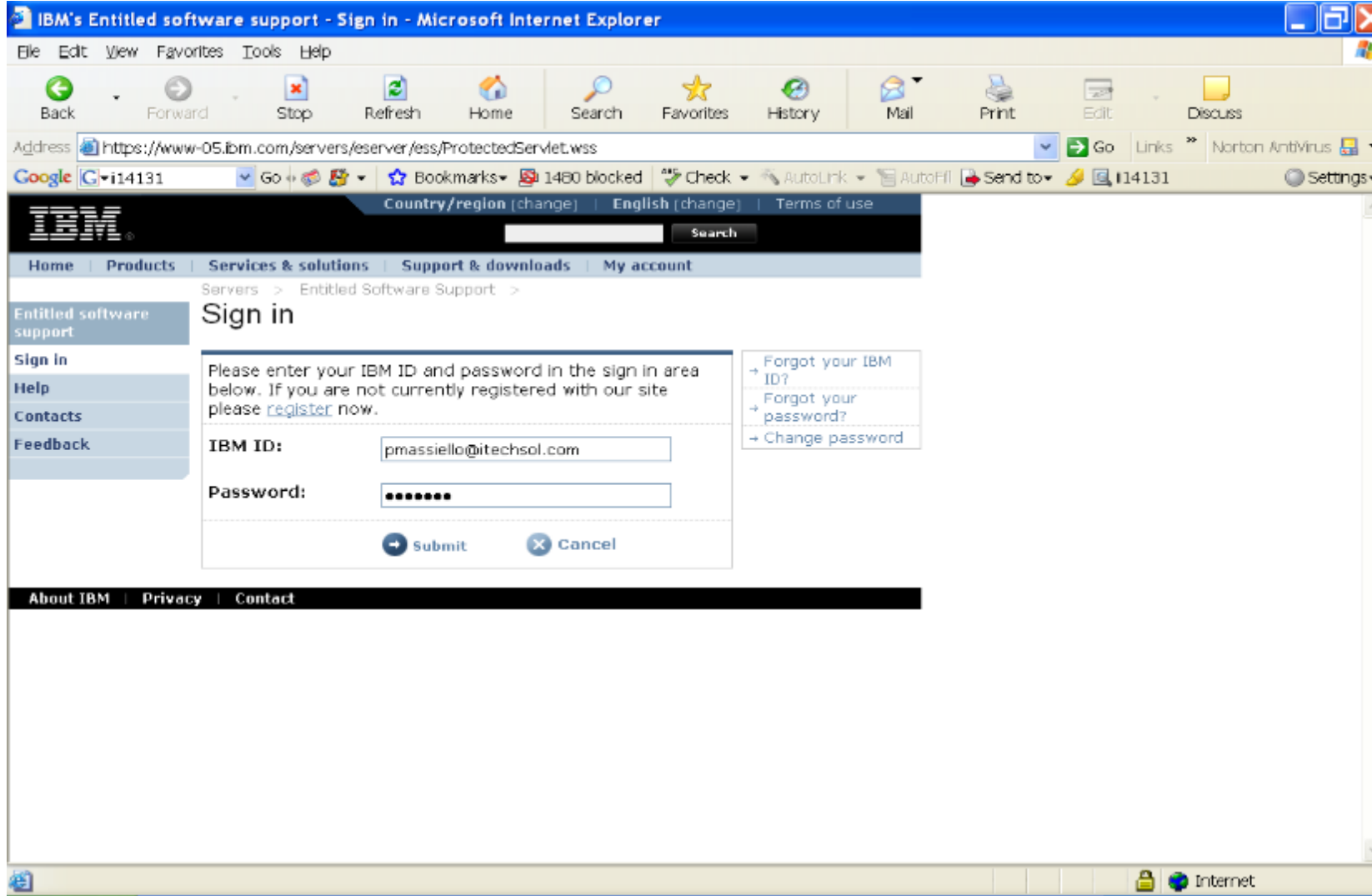
License Keys

- No longer come printed with your order
- Locate the Customer packing list from your software order to obtain:
 - Customer number
 - Software Order



**Don't
Forget**

http://www.ibm.com/eserver/ess



Select License Keys you want

Product number	Type	Product name	Version / release	Expires
☒ 5770BR1	OTC	*BRMS	V7R5M0	
☒ 5770BR1	OTC	*BRMS Network Feature	V7R5M0	
☒ 5770BR1	OTC	*BRMS Advanced Functions	V7R5M0	
☒ 5770JS1	OTC	*Advanced Job Scheduler	V7R2M0	
☒ 5770PT1	OTC	*Performance Tools	V7R5M0	
☒ 5770PT1	OTC	*Performance Tools Manager	V7R5M0	
☒ 5770SS1	OTC	*IBM i	V7R5M0	
☒ 5770SS1	OTC	*IBM i - Per Processor	V7	
☒ 5770SS1	OTC	*IBM i Users	V7	

These are your Keys

	Type:	OTC
	Key output:	ADDLICENSE PRDID(5770WDS) LICTRM(V7R5M0) FEATURE(5103) SERIAL(*LOCAL) PRCGRP(P10) LICENSE(328D4D 0F0578 F6FF01) USGLMT(3) EXPDATE(*NONE) VNDDTA(*NONE)
☐	Product name:	DB2 and SQL Dev Kit
	Type:	OTC
	Key output:	ADDLICENSE PRDID(5770ST1) LICTRM(V7R5M0) FEATURE(5050) SERIAL(*LOCAL) PRCGRP(P10) LICENSE(A64F88 9A0895 C16B01) USGLMT(*NOMAX) EXPDATE(*NONE) VNDDTA(*NONE)
☐	Product name:	BRMS
	Type:	OTC

Enter each Key

Add License Key Information (ADDLICENSE)

Type choices, press Enter.

License key input	> <u>*PROMPT</u>	*PROMPT, *LICENSEFILE, *TAPE
Product identifier	> <u>5770WDS</u>	Identifier
License term	> <u>V7R5M0</u>	Vx, VxRy, VxRyMz
Feature	> <u>5103</u>	5001-9999
System serial number	> <u>*LOCAL</u>	Number, *LOCAL, *REMOTE, *ALL
Processor group	> <u>P10</u>	Character value, *ANY
License key:		
Characters 1 - 6	> <u>328D4D</u>	Character value
Characters 7 - 12	> <u>0F0578</u>	Character value
Characters 13 - 18	> <u>F6FF01</u>	Character value
Usage limit	> <u>3</u>	0-999999, *NOMAX
Expiration date	> <u>*NONE</u>	Date, *NONE
Vendor data	> <u>*NONE</u>	Character value, *NONE

Bottom

F3=Exit F4=Prompt F5=Refresh F12=Cancel F13=How to use this display

What we will cover...

Map, starting, and documentation

Analyze Object Conversion

Release Mapping

HMC, FSP, firmware, & IBM i

Models

Required PTFs, Resaves, and License Keys

Image Catalog & Preparing

Right before the upgrade

The Upgrade

Verification

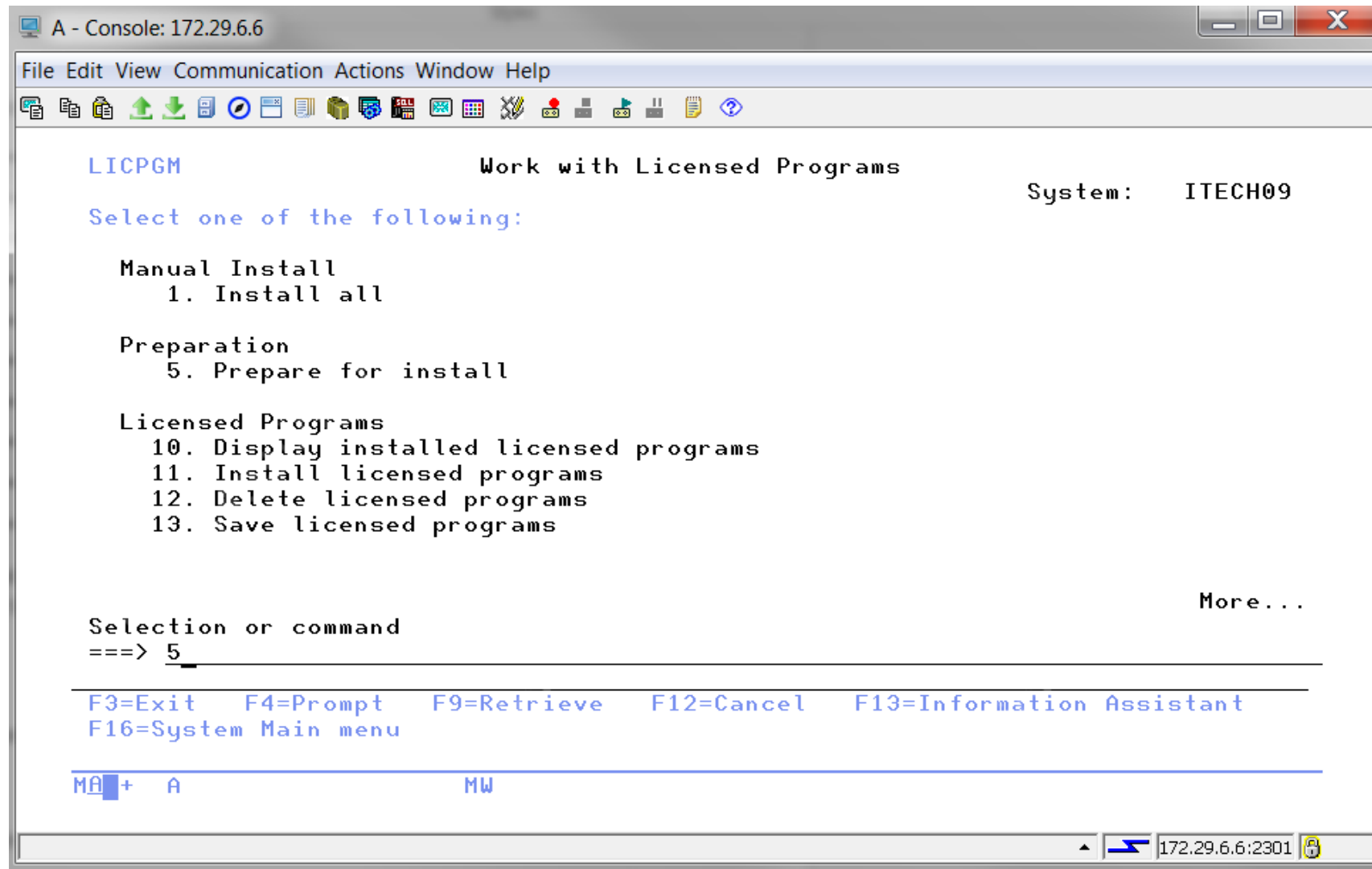
Conversions & Afterwards

Required Prepare for Installation

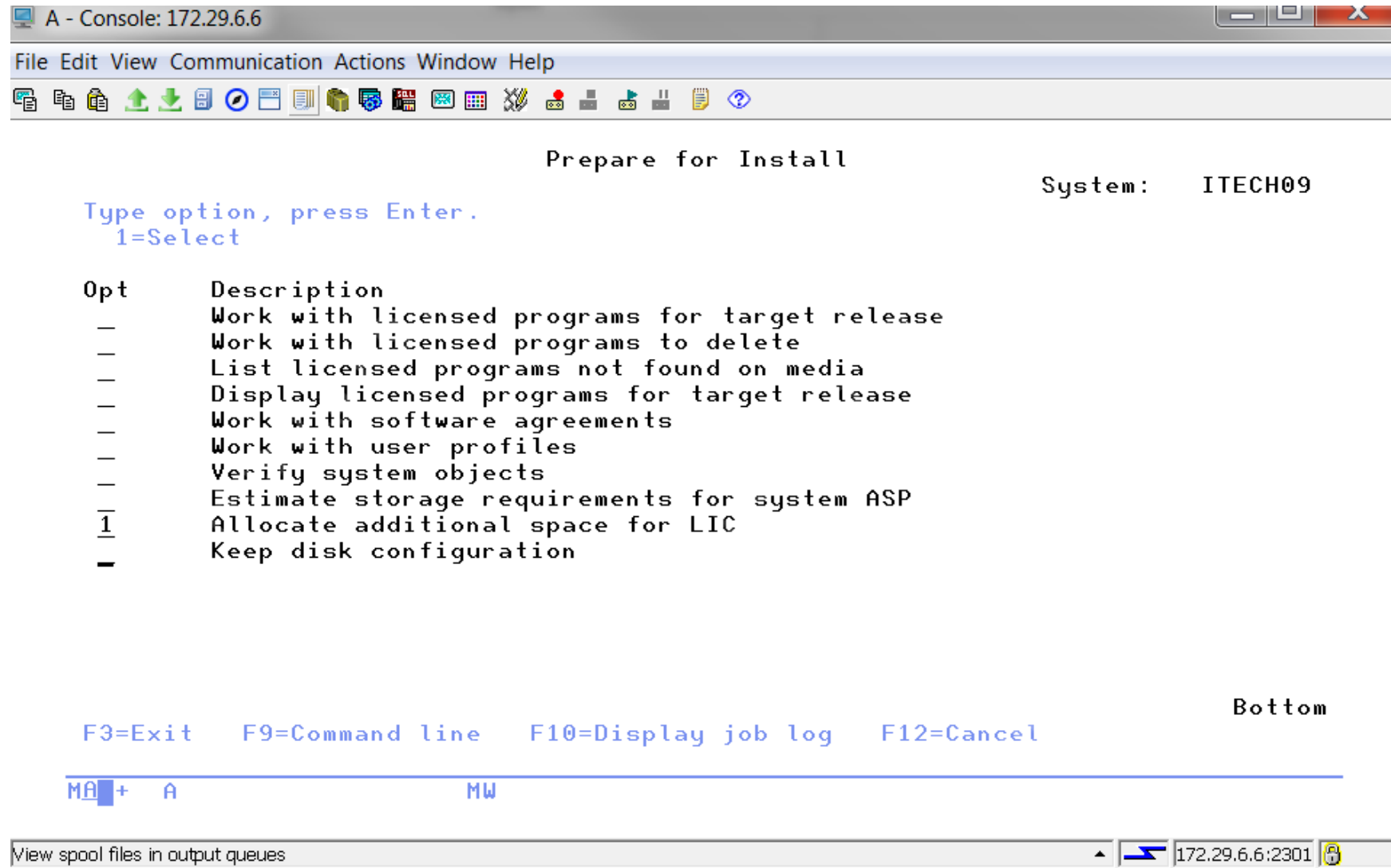
- Upgrading from V7R1M0 –
 - SI59835, SI52927, SI52990, SI65908, SI67578
- Upgrading from V7R2M0 –
 - SI68959, SI67763, SI65907, SI52981, MF59284, MF64101, MF59952, MF60475, SI52910, SI52991, SI67589, MF69011, MF67472
- Upgrading from V7R3M0 –
 - SI73360, MF63905, MF67366, MF67474, MF70495, SI82497, SI81032, SI65839, MF68159
- Actions needed prior to upgrading to 7.4 to avoid an 5770SS1 Option 1 install failure during the upgrade to 7.4. If upgrading from 7.2
 - If SI64507 is applied, no further action is needed.
 - If SI64507 is not applied, RNMOBJ OBJ(QSYS2/SYSTR00001) OBJTYPE(*FILE) NEWOBJ(SYSTRIGGER)
- Upgrading from 7.4
 - SI73375, MF67476, SI83142, MF68163, MF68532, MF71557, MF68163
- Upgrading from 7.5
 - MF71558



Lets start to Prepare: GO LICPGM



Prepare to Install



Additional Space required on Load Source

- IBM I 7.6 requires increasing additional space to LIC before ANY upgrade.
- Increase the space for the licensed internal code prior to upgrading.
- The following PTFs are required to be installed first:
 - 6.1.0 MF59327 & SI51661
 - 6.1.1 MF59328 & SI51661
 - 7.1.0 MF59277
 - 7.2.0 MF64101 & SI68959
 - 7.3.0 MF67366 & SI73360, MF65903*
 - 7.4.0 SI73375 & MF67367, MF71557, MF65906*
 - 7.5.0 MF71558
- Call QLPALCSP PARM('V7R6M0' '0')
- If using 4096 Sector Load Source: 7.2 MF65901, 7.3 MF65903, 7.4 MF65906; and requires 2 IPLs
- * On systems with 4096 sector Load source

Increase License Internal code

Allocate Additional Space for LIC

System: UPGRADE

The Allocate additional space for LIC option allows you to allocate additional storage space, if needed, for a planned upgrade of Licensed Internal Code (LIC). Either all of the space can be allocated during the next initial program load (IPL) or part of the space can be allocated by a background task and then the remaining space can be allocated during the next IPL.

Background task : No
Next IPL : No

Type choices, press Enter.

Allocate space for release	<u>V7R5M0</u>	*NONE, VxRxMx
Start space allocation	<u>*IMMED</u>	*IMMED, *DELAYED

F3=Exit F5=Refresh F12=Cancel

Bottom

MO

46 1054

Permanently Apply PTFs

- APYPTF LICPGM(*ALL) APY(*PERM)
DELAYED(*IMMDLY) IPLAPY(*YES)

- Saves Space



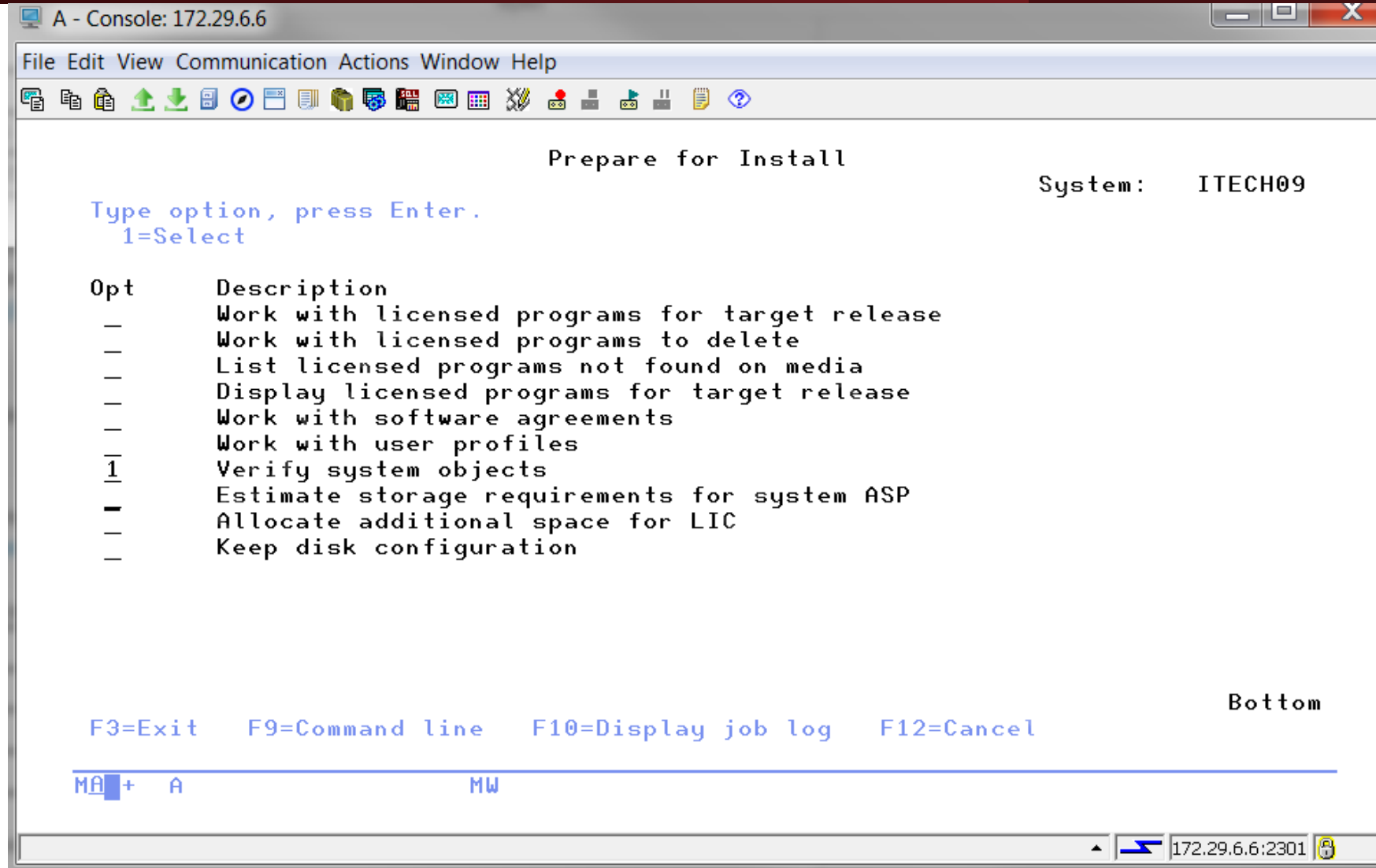
- Can't have any PTFs set for apply when the upgrade starts.

Document these System Values

- WRKSYSVAL
 - QSYSLIBL _____
 - QUSRLIBL _____
 - QALWOBJRST _____ (Needs to be *All)
 - QVFYOBJRST _____ (Max is 3)
 - QSTRUPPGM _____
 - QSCANFSCTL _____ (Change to *NOPOSTRST)
- Good time to look at your startup program.



Verify User Profiles & Cross Ref.



QSECOFR & Libraries

- Make sure the QSECOFR profile:
 - Does not have a secondary language
- All IBM Libraries are in the SYSTEM ASP.
- Check for Secondary languages on machine as you will need new versions.

Compress Job Tables *NONE

Session A - [24 x 80]

File Edit View Communication Actions Window Help

Change IPL Attributes (CHGIPLA)

Type choices, press Enter.

Restart type	<u>*SYS</u>	*SAME, *SYS, *FULL
Keylock position	<u>*NORMAL</u>	*SAME, *NORMAL, *AUTO...
Hardware diagnostics	<u>*MIN</u>	*SAME, *MIN, *ALL
Compress job tables	<u>*NONE</u>	*SAME, *NONE, *NORMAL...
Check job tables	<u>*ABNORMAL</u>	*SAME, *ABNORMAL, *ALL, *SYNC
Rebuild product directory . . .	<u>*NONE</u>	*SAME, *NONE, *NORMAL...
Mail Server Framework recovery	<u>*NONE</u>	*SAME, *NONE, *ABNORMAL
Display status	<u>*ALL</u>	*SAME, *SYS, *NONE...
Start TCP/IP	<u>*YES</u>	*SAME, *YES, *NO
Clear job queues	<u>*NO</u>	*SAME, *YES, *NO
Clear output queues	<u>*NO</u>	*SAME, *YES, *NO
Clear incomplete joblogs . . .	<u>*NO</u>	*SAME, *YES, *NO
Start print writers	<u>*YES</u>	*SAME, *YES, *NO
Start to restricted state . . .	<u>*NO</u>	*SAME, *YES, *NO

Bottom

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

MA a 05/037

I902 - Session successfully started Win2PDF on PDFFILE:

Arrange the media in this Order

- I_BASE_01
- B29xx_01
- B29xx_02
- B29MM_03
- B29MM_04
- D29xx_01
- D29xx_02
- D29xx_03
- D29xx_04
- D29xx_05
- D29xx_06
- L29xx_01
- L29xx_02
- Any F29xx CDs to follow

xx will be 24 for
US English

DVDs for 6.1

I_BASE_01

B29xx_01

B29xx_02

F29xx_01

x will be 1 for Americas &
western Europe f/c 5817

DVDs 7.1, 7.2, 7.3, 7.4, 7.5, & 7.6

I_BASE_01

B_GROUPx_01

B_GROUPx_02

B_GROUPx_03

B_GROUPx_04

B_GROUPx_05

F_MULTI_NLV

F29xx

Required PTFs Image Catalogues

- Upgrading from V5R3M5 –
 - SI28698, MF42599, MF43355
- Upgrading from V5R4M0 –
 - SI42903, MF51693, MF43154, MF46264, MF47159, MF54341
- Upgrading from V5R4M5 –
 - SI42903, MF53640, MF47160, MF52757, MF53717, MF54314
- Upgrading from V6R1M0 –
 - SI44484, SI57013, MF43198, MF46292, MF47203, MF53927, MF53936, MF53938, MF53949, MF59281
- Upgrading from V6R1M1 –
 - SI44484, SI57013, MF47204, MF51455, MF53864, MF53865, MF54034, MF59282
- Upgrading from V7R1M0 –
 - SI56159, SI59835, MF50235 MF51411, MF53918, MF53919, MF59277, MF59283, MF63879.
MF60229 & MF60263 (TR9+)
- Upgrading from V7R2M0 –
 - SI68959, SI67763, SI52981, MF59284, MF64101, MF59952, MF60475, MF63892, MF67472, MF70494, SI82460
- Upgrading from V7R3M0 –
 - SI73360, MF63905, MF67366, MF67474, SI822497
- Upgrading from V7R4M0 –
 - SI73375, MF68163, MF67476, SI83142, MF70925, MF70909, MF68532
- Upgrading from V7R5M0 –
 - MF70806, MF70886



Create Image Catalog

Create Image Catalog (CRTIMGCLG)

Type choices, press Enter.

Image catalog > V75UPGRADE Name
Directory > '/a75upgrade'

Image catalog type	<u>*OPT</u>	*OPT, *TAP
Create directory	<u>*YES</u>	*YES, *NO
Import image catalog	<u>*NO</u>	*NO, *YES
Catalog ASP threshold	<u>*CALC</u>	1-99, *CALC, *MAX
Add virtual volumes	<u>*dir</u>	1-256, *NONE, *DIR

Additional Parameters

Text 'description' V7R5 Upgrade Images

Authority *EXCLUDE Name, *EXCLUDE, *LIBCRTAUT...

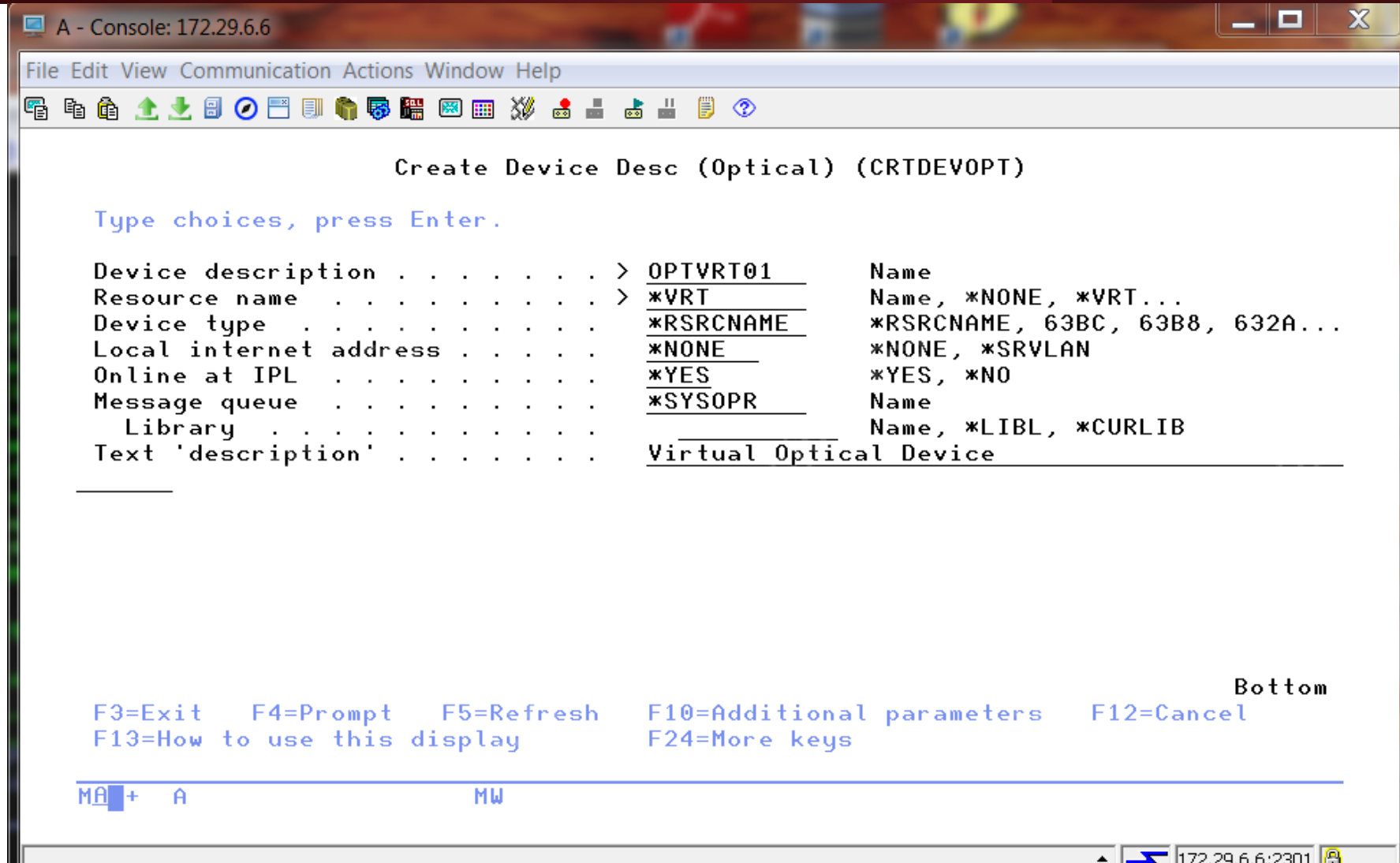
Bottom

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

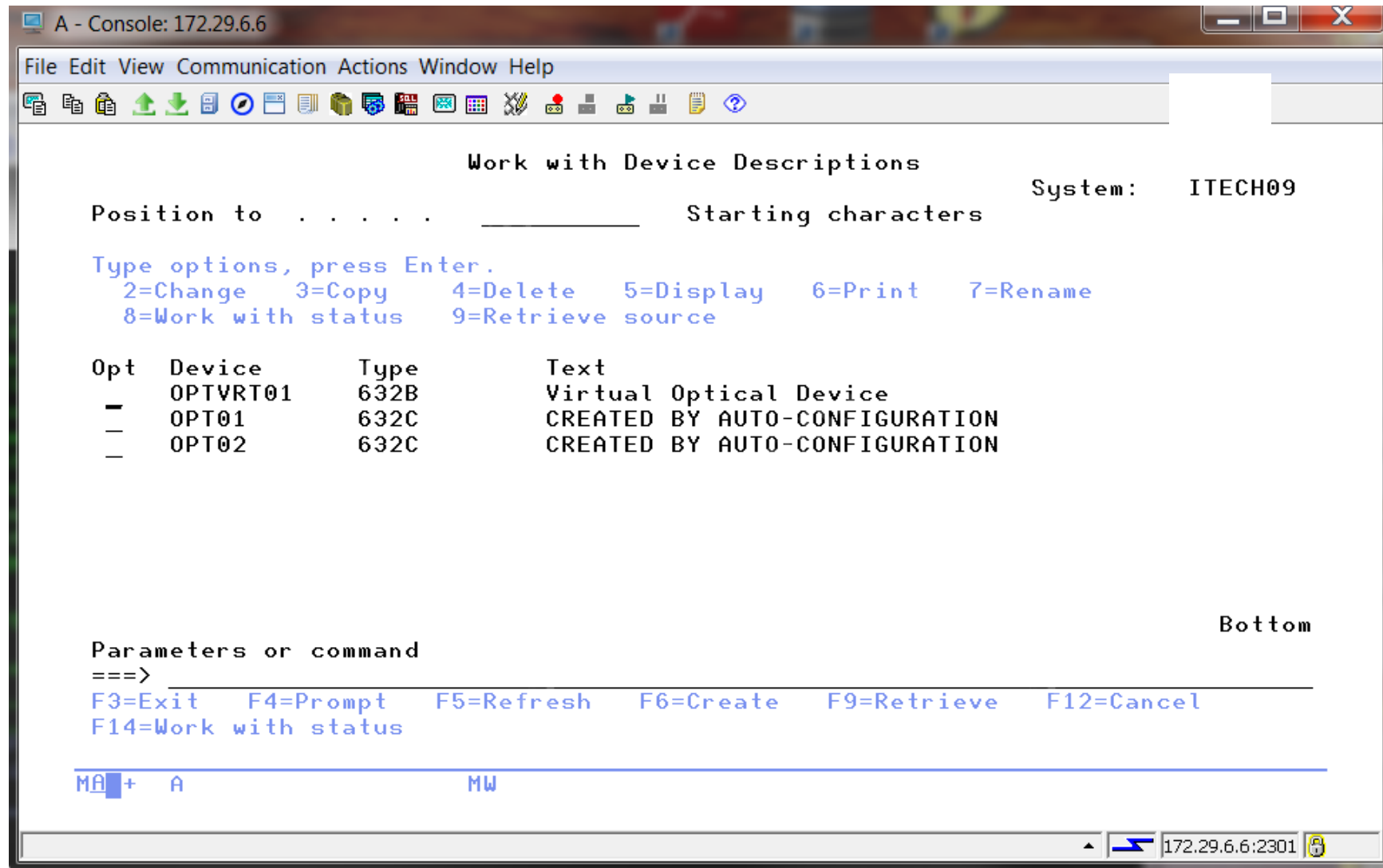
Determine Space for Image Catalog Installation

- Verify required PTFs for upgrade (7.3 MF68159, 7.4 MF68532, 7.5 None)
- Go into SST, STRSST
- Choose (1) Start a Service Tool
- Choose (4) Display/Alter/Dump
- Choose (1) Display/Alter Storage
- Choose (2) License Internal Code Data
- Choose (14) Advanced Analysis
- Find **installCheckspace** enter 1 next to it, and press enter. Then press enter again.
- If the tool is successful, there is enough space and you will see:
 - SUCCESSFUL! Space exists. Size = xxxxxx bytes.
- If the tool returns an error for not enough storage, you will see:
 - ERROR: Enough space does not exist. Error code X.
- IBM I image catalog installation requires at least 2500MB of free space on the load-source disk unit.

Create Virtual Optical



Optical Devices Required



For Each DVD in the Order we perform this or download

Add Image Catalog Entry (ADDIMGCLGE)

Type choices, press Enter.

Image catalog	> <u>V74UPGRADE</u>	Name
From optical device, or	> <u>OPT01</u>	Name, *VOL
From image file		
To image file	<u>*GEN</u>	
Image catalog index	<u>*AVAIL</u>	1-256, *AVAIL
Replace catalog entry	<u>*NO</u>	*NO, *YES, *INSERT

F3=Exit F4=Prompt F5=Refresh F10=Additio
F13=How to use this display F24=More ke

MA + F MW

File Edit View Communication Actions Window Help



Add Image Catalog Entry (ADDIMGCLGE)

Type choices, press Enter.

Image catalog	IMGCLG	> <u>V74UPGRADE</u>
From optical device, or	FROMDEV	
From image file	FROMFILE	<u>/V74/I_BASE_01.iso</u>
To image file	TOFILE	<u>*fromfile</u>
Image catalog index	IMGCLGIDX	<u>*AVAIL</u>
Replace catalog entry	REPLACE	<u>*NO</u>

F3=Exit F4=Prompt F5=Refresh F10=Additional parameters F12=Cancel
F13=How to use this display F24=More keys

Bottom

MA A

MW

09/050

WRKIMGCLGE

Work with Image Catalog Entries

Catalog . . . : V75UPGRADE Status . . . : System: UPGRADE
Type : Optical Device . . . :

Directory : /av75os

Type options, press Enter.

1=Add 2=Change 4=Remove 6=Mount 8=Load 9=Unload
10=Initialize volume 12=Work with volume

Opt	Index	Status	Image File Name
█	*AVAIL		
—	1	Loaded	I_BASE_01.2100.0000.ISO
—	2	Loaded	B_GROUP3_01.0410.0002.ISO
—	3	Loaded	B_GROUP3_02.0410.0002.ISO
—	4	Loaded	B_GROUP3_03.0410.0002.ISO
—	5	Loaded	B_GROUP3_04.0410.0002.ISO
—	6	Loaded	B_GROUP3_05.0410.0002.ISO
—	7	Loaded	F_MULTI_NLV_AMT.ISO

More...

F3=Exit F5=Refresh F6=Load/Unload image catalog F7=Verify image catalog
F8=Reorder by index F12=Cancel F24=More keys

Associate Virtual Optical to Catalog

Load or Unload Image Catalog (LODIMGCLG)

Type choices, press Enter.

Image catalog	> V75UPGRADE	Name
Option	> *LOAD	*LOAD, *UNLOAD
Virtual device	<u>optvrt01</u>	Name
Write protect	<u>*DFT</u>	*DFT, *ALL, *NONE
Library mode	<u>*NO</u>	*NO, *YES

Bottom

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

Optical Device loaded and Ready

Work with Image Catalog Entries

Catalog . . . : V75UPGRADE Status . . . : Ready System: UPGRADE
Type : Optical Device . . . : OPTVRT01

Directory : /av75os

Type options, press Enter.

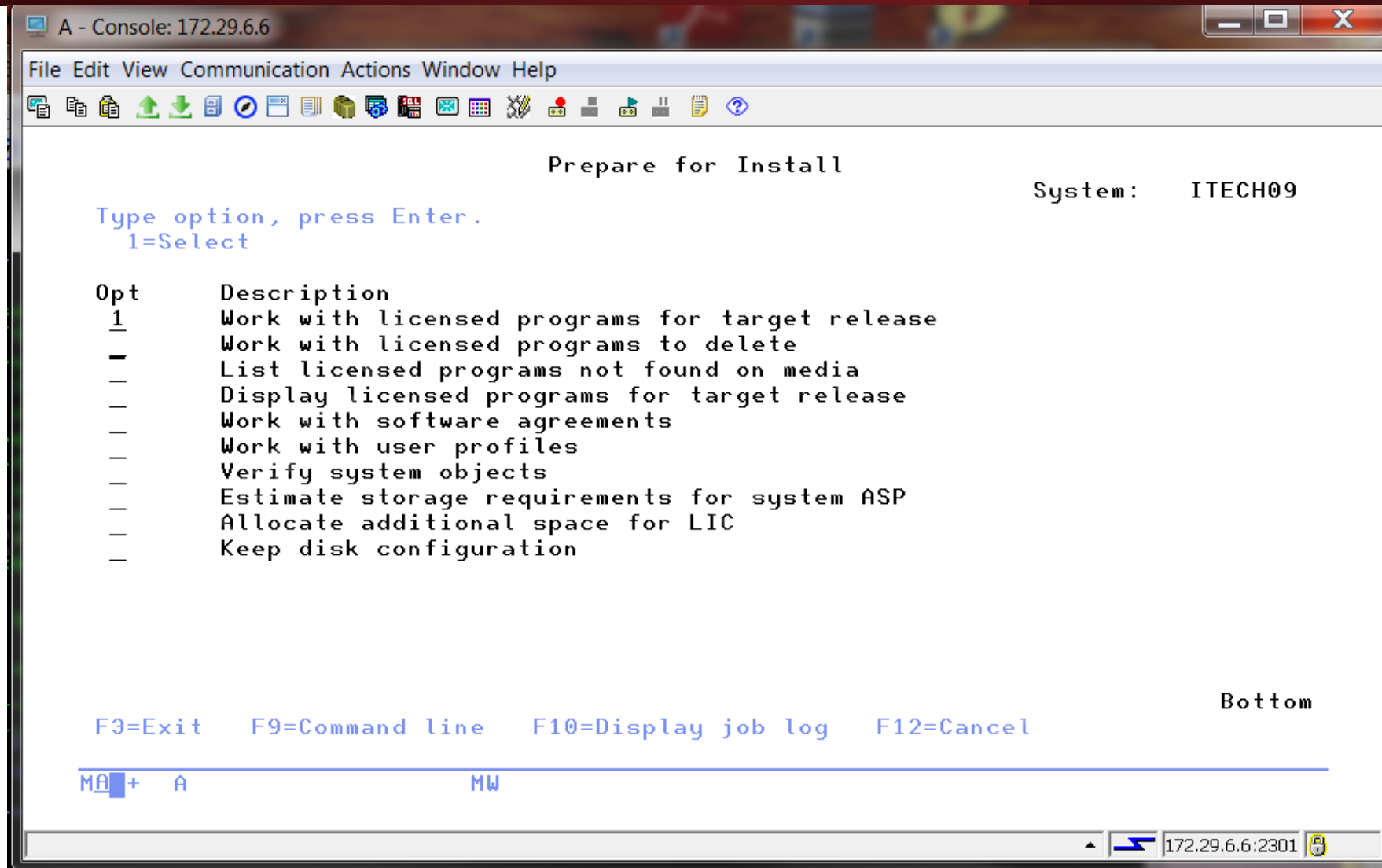
1=Add 2=Change 4=Remove 6=Mount 8=Load 9=Unload
10=Initialize volume 12=Work with volume

Opt	Index	Status	Image File Name
█	*AVAIL		
—	1	Mounted	I_BASE_01.2100.0000.ISO
—	2	Loaded	B_GROUP3_01.0410.0002.ISO
—	3	Loaded	B_GROUP3_02.0410.0002.ISO
—	4	Loaded	B_GROUP3_03.0410.0002.ISO
—	5	Loaded	B_GROUP3_04.0410.0002.ISO
—	6	Loaded	B_GROUP3_05.0410.0002.ISO
—	7	Loaded	F_MULTI_NLV_AMT.ISO

More...

F3=Exit F5=Refresh F6=Load/Unload image catalog F7=Verify image catalog
F8=Reorder by index F12=Cancel F24=More keys

Create List for what to upgrade



Build the list

```
Work with Licensed Programs for Target Release
System:  UPGRADE
Type choices, press Enter.

Generate list from  1
1=Distribution media
2=Merge with additional distribution media
3=Modify previously generated list

Optical device . . . OPTVRT01 *NONE, Name
Target Release . . . V7R5M0    VxRxMx
```

F3=Exit F12=Cancel

Select LPPs

```
Work with Licensed Programs for Target Release  
Target release . . . . . : V7R5M0 System. UPGRADE  
Estimated additional storage for selections (M) . . . : 2157.69
```

Type options, press Enter.

1=Select 5=Display release-to-release mapping

Opt	Licensed Program	Product Option	Description
<u>1</u>	5770999	*BASE	Licensed Internal Code
<u>1</u>	5770SS1	*BASE	IBM i
<u>1</u>	5770SS1		Library QGPL
<u>1</u>	5770SS1		Library QUSRSYS
<u>1</u>	5770SS1	1	Extended Base Support
<u>1</u>	5770SS1	2	Online Information
<u>1</u>	5770SS1	3	Extended Base Directory Support
<u>1</u>	5770SS1	5	System/36 Environment
<u>1</u>	5770SS1	6	System/38 Environment

More...

F3=Exit F11=Display additional storage F12=Cancel
F19=Display trademarks

F11 – Additional Storage

```
Work with Licensed Programs for Target Release
Target release . . . . . : V7R5M0
Estimated additional storage for selections (M) . . . : 2157.69
System: UPGRADE
```

Type options, press Enter.

1=Select 5=Display release-to-release mapping

Opt	Licensed Program	Additional Storage	Description
<u>1</u>	5770999	.00	Licensed Internal Code
<u>1</u>	5770SS1	450.30	IBM i
<u>1</u>	5770SS1	.02	Library QGPL
<u>1</u>	5770SS1	11.66	Library QUSRSYS
<u>1</u>	5770SS1	181.85	Extended Base Support
<u>1</u>	5770SS1	1.15	Online Information
<u>1</u>	5770SS1	1012.48	Extended Base Directory Support
<u>1</u>	5770SS1	-4.04	System/36 Environment
<u>-</u>	5770SS1	.00	System/38 Environment

More...

F3=Exit F11=Display expected release F12=Cancel F19=Display trademarks

F11 – Expected release

```
Work with Licensed Programs for Target Release
System:  UPGRADE
Target release . . . . . : V7R5M0
Estimated additional storage for selections (M) . . . : 2157.69
```

Type options, press Enter.

1=Select 5=Display release-to-release mapping

Opt	Licensed Program	Expected Release	Description
<u>1</u>	5770999	V7R5M0	Licensed Internal Code
<u>1</u>	5770SS1	V7R5M0	IBM i
<u>1</u>	5770SS1	V7R5M0	Library QGPL
<u>1</u>	5770SS1	V7R5M0	Library QUSRSYS
<u>1</u>	5770SS1	V7R5M0	Extended Base Support
<u>1</u>	5770SS1	V7R5M0	Online Information
<u>1</u>	5770SS1	V7R5M0	Extended Base Directory Support
<u>1</u>	5770SS1	V7R5M0	System/36 Environment
<u>1</u>	5770SS1	V7R5M0	System/38 Environment

More...

F3=Exit F11=Display expected action F12=Cancel F19=Display trademarks

F11 – Expected Action

```
Work with Licensed Programs for Target Release
Target release . . . . . : V7R5M0
Estimated additional storage for selections (M) . . . : 2157.69
```

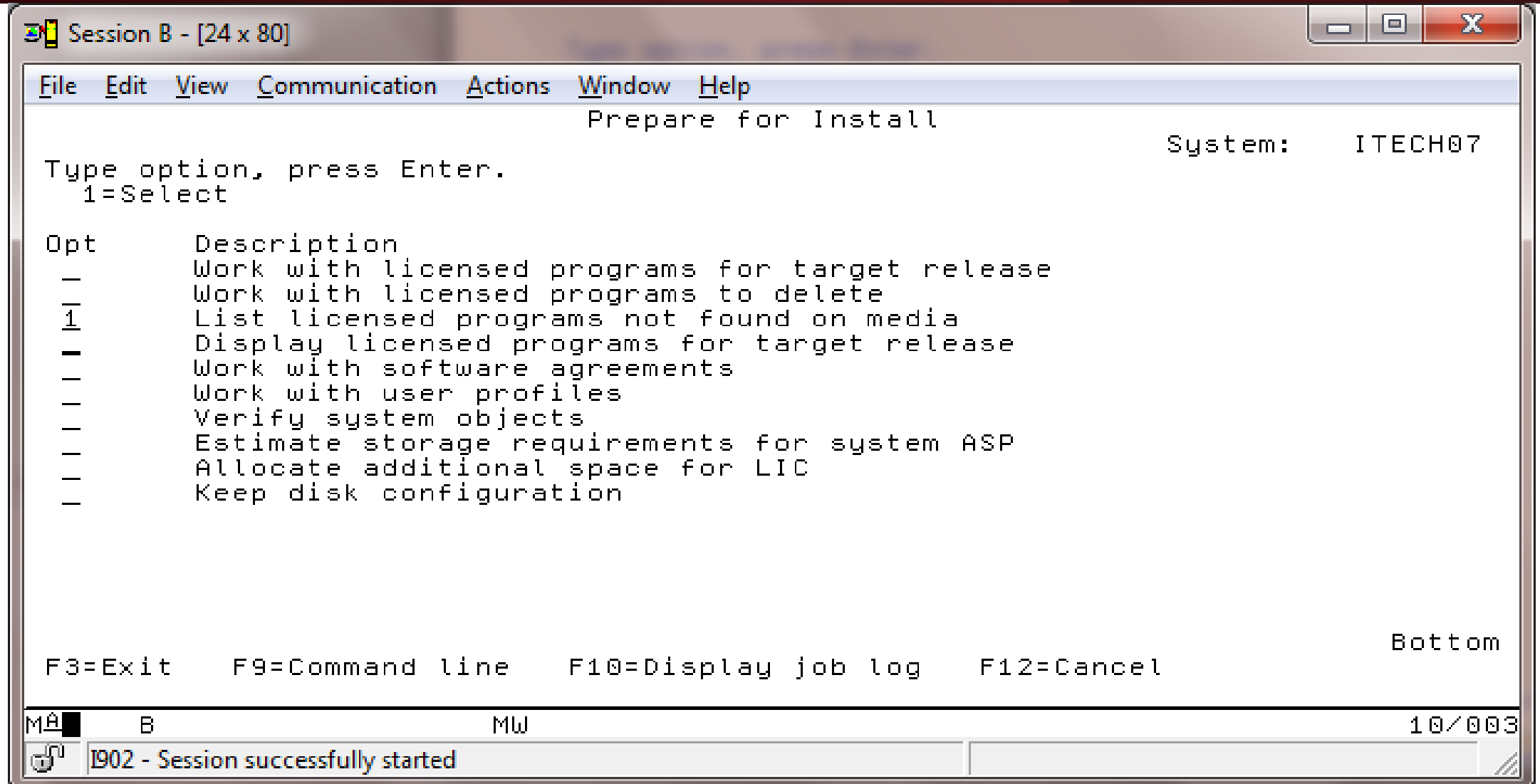
Type options, press Enter.
1=Select 5=Display release-to-release mapping

Opt	Licensed Program	Expected Action	Description
<u>1</u>	5770999	Replace	Licensed Internal Code
<u>1</u>	5770SS1	Replace	IBM i
<u>1</u>	5770SS1	Replace	Library QGPL
<u>1</u>	5770SS1	Replace	Library QUSRSYS
<u>1</u>	5770SS1	Replace	Extended Base Support
<u>1</u>	5770SS1	Replace	Online Information
<u>1</u>	5770SS1	Replace	Extended Base Directory Support
<u>1</u>	5770SS1	Replace	System/36 Environment
<u>1</u>	5770SS1	Replace	System/38 Environment

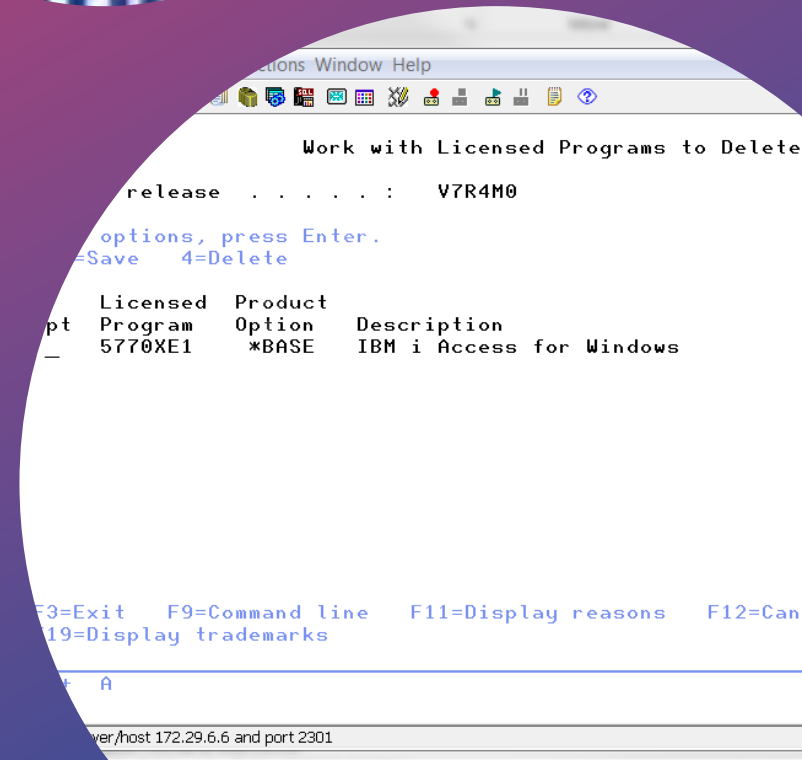
More...

F3=Exit F11=Display product option F12=Cancel F19=Display trademarks

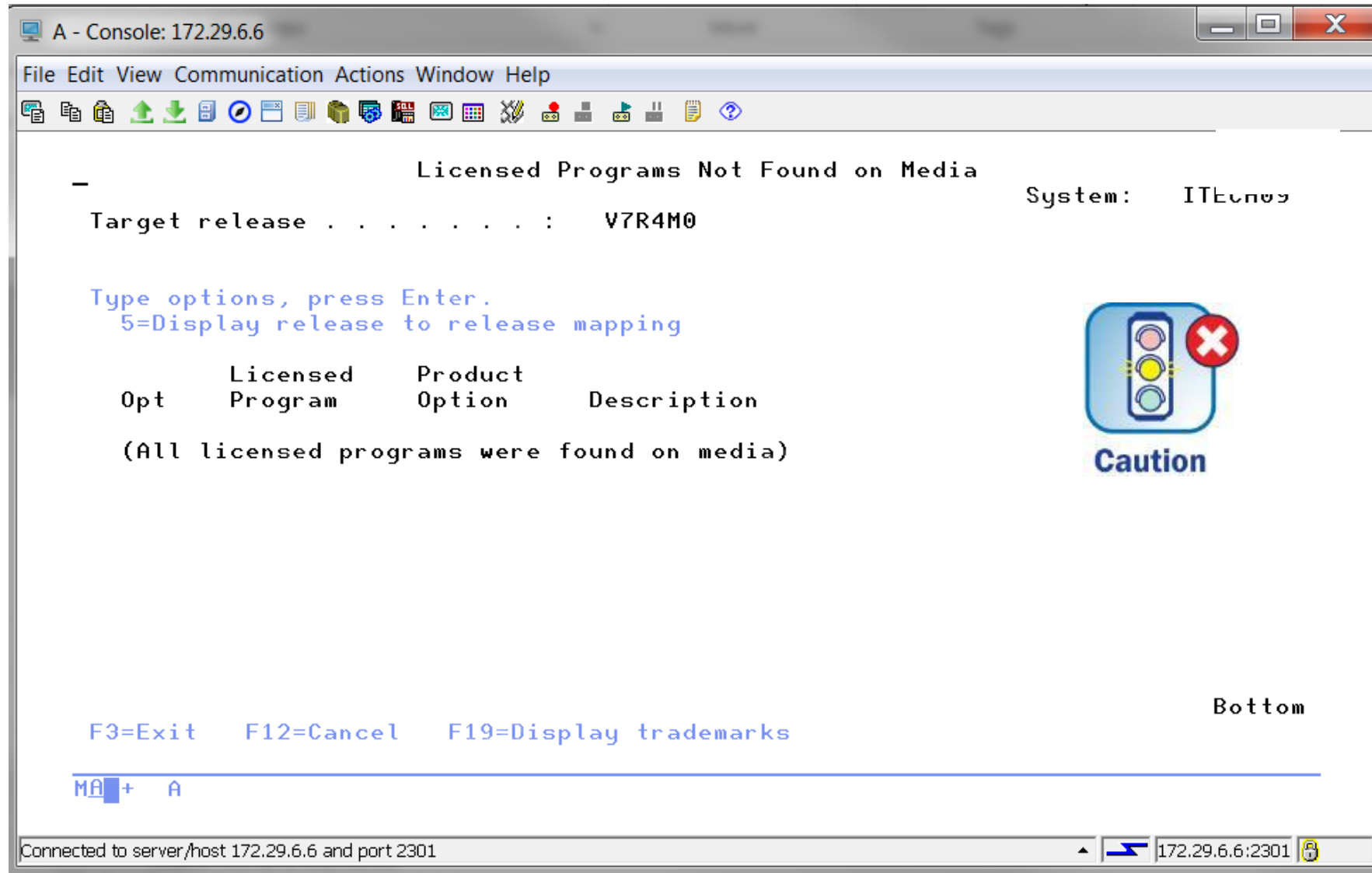
Our menu



Software to Delete – Should be Empty



Software not found on Media



Software for Target release



```
Session B - [24 x 80]
File Edit View Communication Actions Window Help
Display Licensed Programs for Target Release
System: ITECH07
Target release . . . . . : V7R2M0
Estimated additional storage for selections (M) : . . . : 4162.78

Type options, press Enter.
5=Display release to release mapping

Opt Licensed Program Description Expected Action
-- 5770SS1 Digital Certificate Manager Replace
-- 5770SS1 International Components for Unicode Replace
-- 5770SS1 Additional Fonts Replace
-- 5770SS1 IBM Advanced Data Security for i - Add
-- 5770DG1 IBM HTTP Server for i Replace
-- 5770JV1 IBM Developer Kit for Java Replace
-- 5770JV1 Java SE 6 32 bit Replace
-- 5770JV1 Java SE 6 64 bit Replace
-- 5770JV1 Java SE 7 32 bit Add

More...

F3=Exit F9=Command line F11=Display view 2 F12=Cancel
F19=Display trademarks

MA B MW 15/057
1902 - Session successfully started
```

Accept Software Licenses

Work with Software Agreements

System: UPGRADE

Currently selected language : English

Type options, press Enter.
4=Remove 5=Display 6=Print

Opt	Licensed Program	Product Option	Product Release	Accept Status
█	*MCHCOD			No
—	5770SS1	*BASE	V7R5M0	No
—	5733CY3	*BASE	V7R5M0	No
—	5770DG1	*BASE	V7R5M0	No
—	5770JV1	*BASE	V7R5M0	No
—	57330MF	*BASE	V1R6M0	No
—	5770PT1	*BASE	V7R4M0	No
—	5770QU1	*BASE	V7R5M0	No
—	5733SC1	*BASE	V7R5M0	No
—	5770ST1	*BASE	V7R5M0	No
—	5770TC1	*BASE	V7R5M0	No

More...

F3=Exit F11=Display description F12=Cancel F13=Select language
F19=Display trademarks F22=Restore software agreements

Accept Software Licenses

■ Software Agreement

System: UPGRADE

Licensed program : 5770SS1
Licensed program option . . : *BASE
Release : V7R5M0
Description : IBM i

IMPORTANT: READ CAREFULLY

Two license agreements are presented below.

1. IBM International License Agreement for Evaluation of Programs
2. IBM International Program License Agreement

If Licensee is obtaining the Program for purposes of productive use (other than evaluation, testing, trial "try or buy," or demonstration):
By clicking on the "Accept" button below, Licensee accepts the IBM International Program License Agreement, without modification.



Don't
Forget

More...

F3=Exit F6=Print F12=Cancel F13=Select available language F14=Accept
F15=Accept all F16=Decline F17=Top F18=Bottom

Everyone must display YES

Work with Software Agreements

System: UPGRADE

Currently selected language : English

Type options, press Enter.
4=Remove 5=Display 6=Print

Opt	Licensed Program	Product Option	Product Release	Accept Status
☒	*MCHCOD			Yes
☐	5770SS1	*BASE	V7R5M0	Yes
☐	5733CY3	*BASE	V7R5M0	Yes
☐	5770DG1	*BASE	V7R5M0	Yes
☐	5770JV1	*BASE	V7R5M0	Yes
☐	5733OMF	*BASE	V1R6M0	Yes
☐	5770PT1	*BASE	V7R4M0	Yes
☐	5770QU1	*BASE	V7R5M0	Yes
☐	5733SC1	*BASE	V7R5M0	Yes
☐	5770ST1	*BASE	V7R5M0	Yes
☐	5770TC1	*BASE	V7R5M0	Yes


Checkpoint

More...

F3=Exit F11=Display description F12=Cancel F13=Select language
F19=Display trademarks F22=Restore software agreements

MA+ A

10/003

Estimate Additional Storage

Session B - [24 x 80]

File Edit View Communication Actions Window Help

Estimated Storage Requirements for system ASP.

When upgrading to the target release, type the additional storage required below. You will need to factor in new and updated PRPQ sizes, as well as, other third party software sizes.

The information you provide, along with the value for "Estimated Additional Storage for Selections (M)" on the Work with Licensed Programs for Target Release display, will be used to estimate storage requirements.

Type value, press Enter.

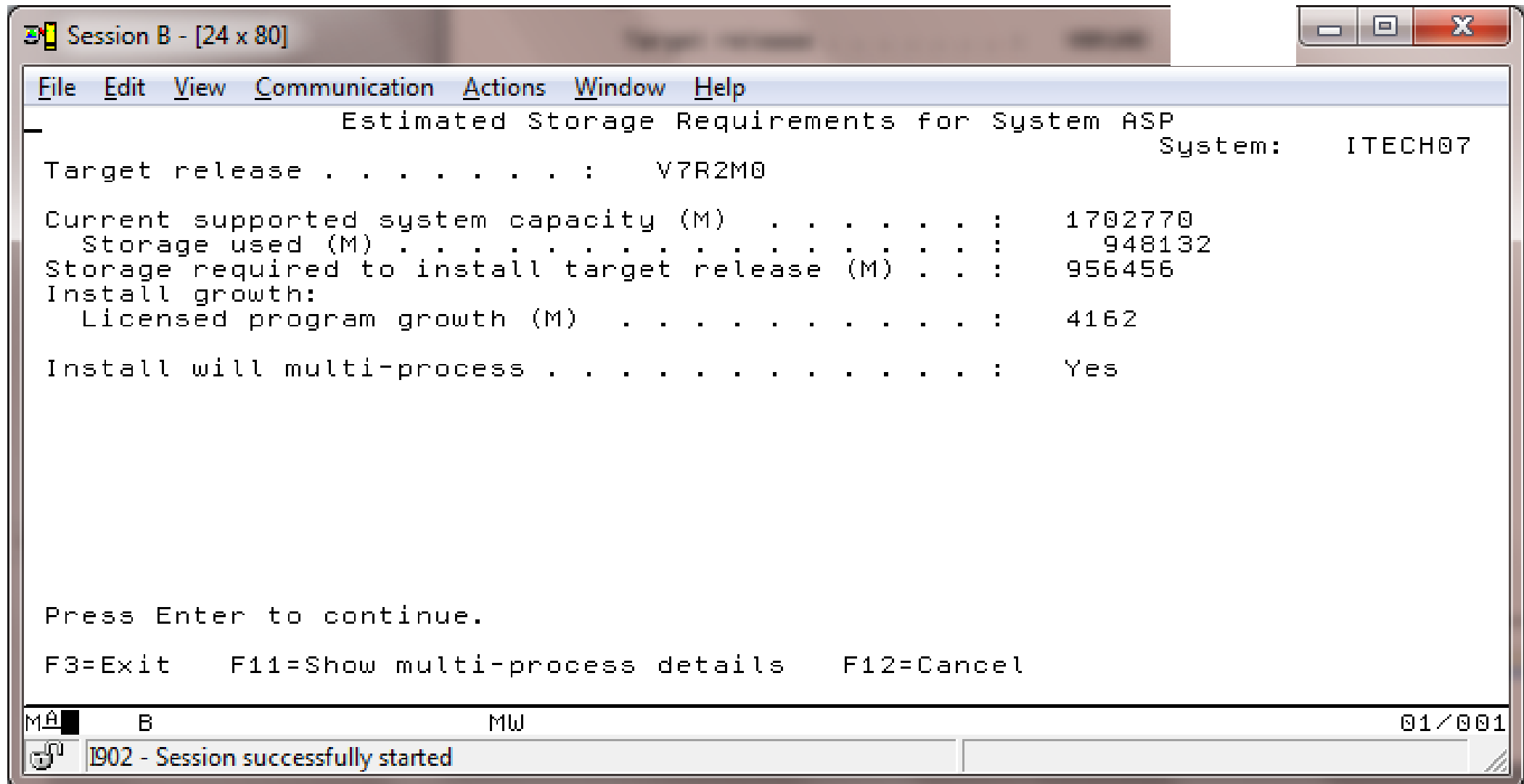
Additional storage required 4162 M

F3=Exit F12=Cancel

MA B MW 14/049

1902 - Session successfully started

We have enough Disk space

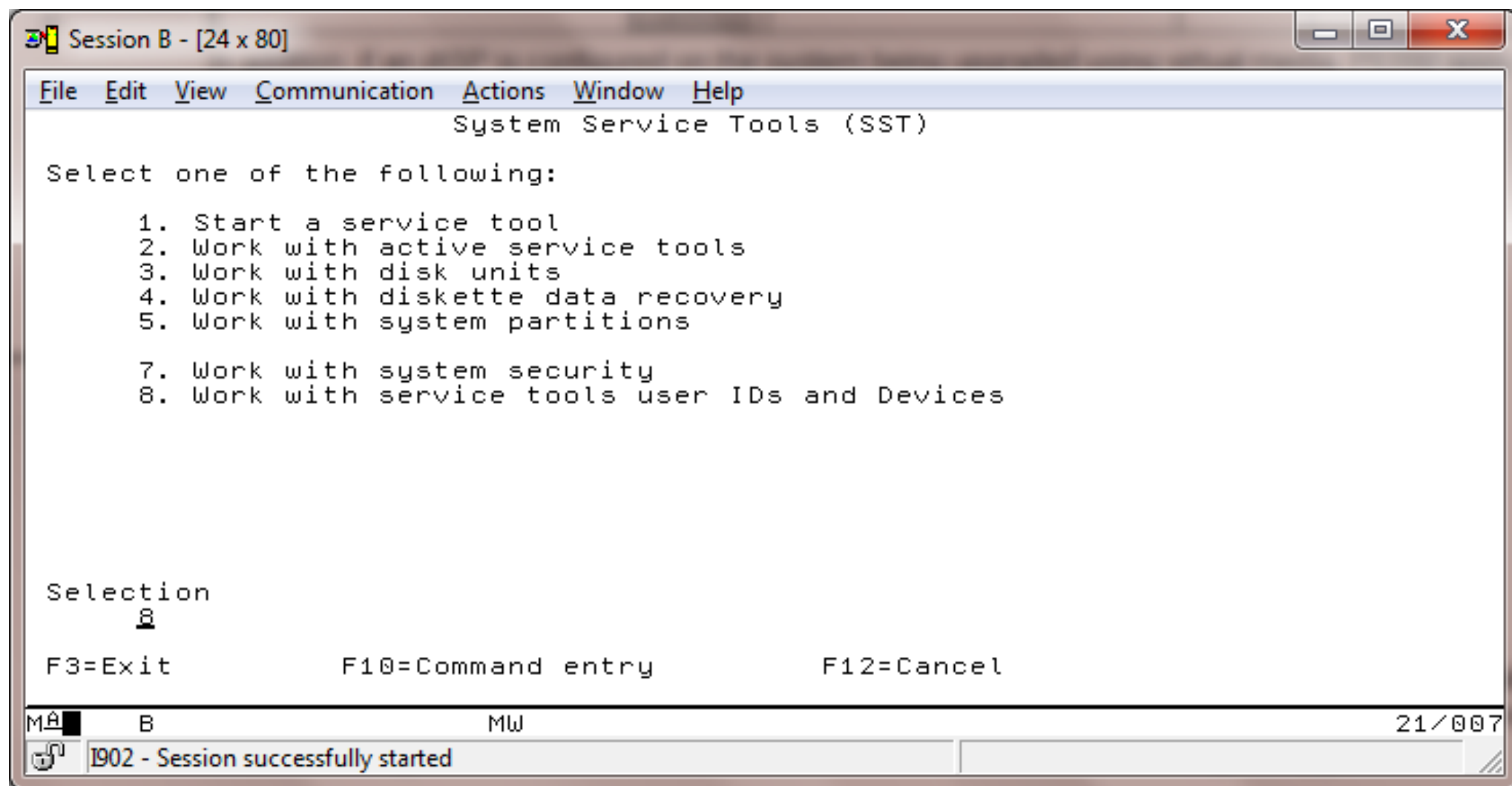


```
Session B - [24 x 80]
File Edit View Communication Actions Window Help
Estimated Storage Requirements for System ASP
System: ITECH07
Target release . . . . . : V7R2M0
Current supported system capacity (M) . . . . . : 1702770
Storage used (M) . . . . . : 948132
Storage required to install target release (M) . . : 956456
Install growth:
Licensed program growth (M) . . . . . : 4162
Install will multi-process . . . . . : Yes

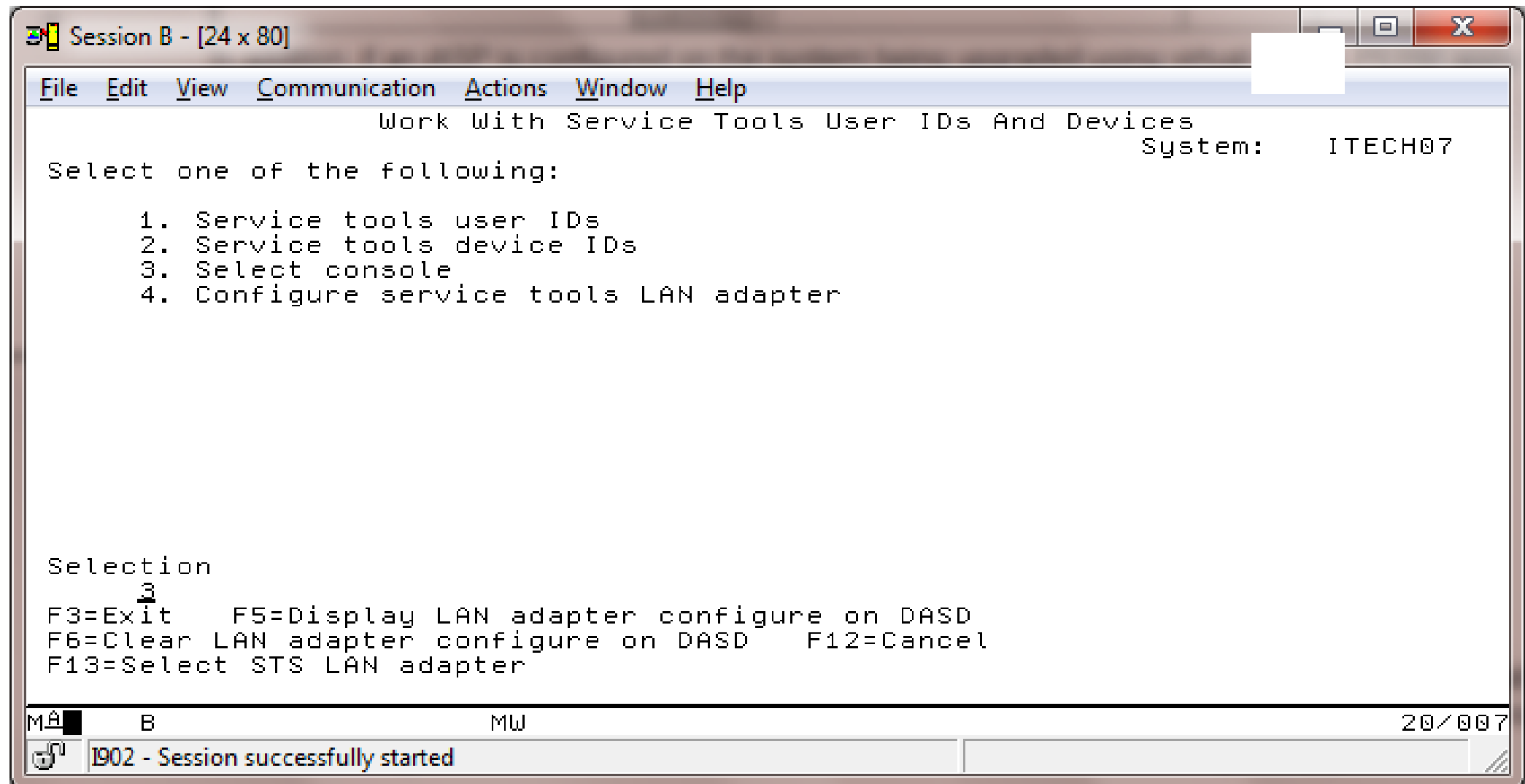
Press Enter to continue.
F3=Exit F11=Show multi-process details F12=Cancel

MA B MW 01/001
1902 - Session successfully started
```

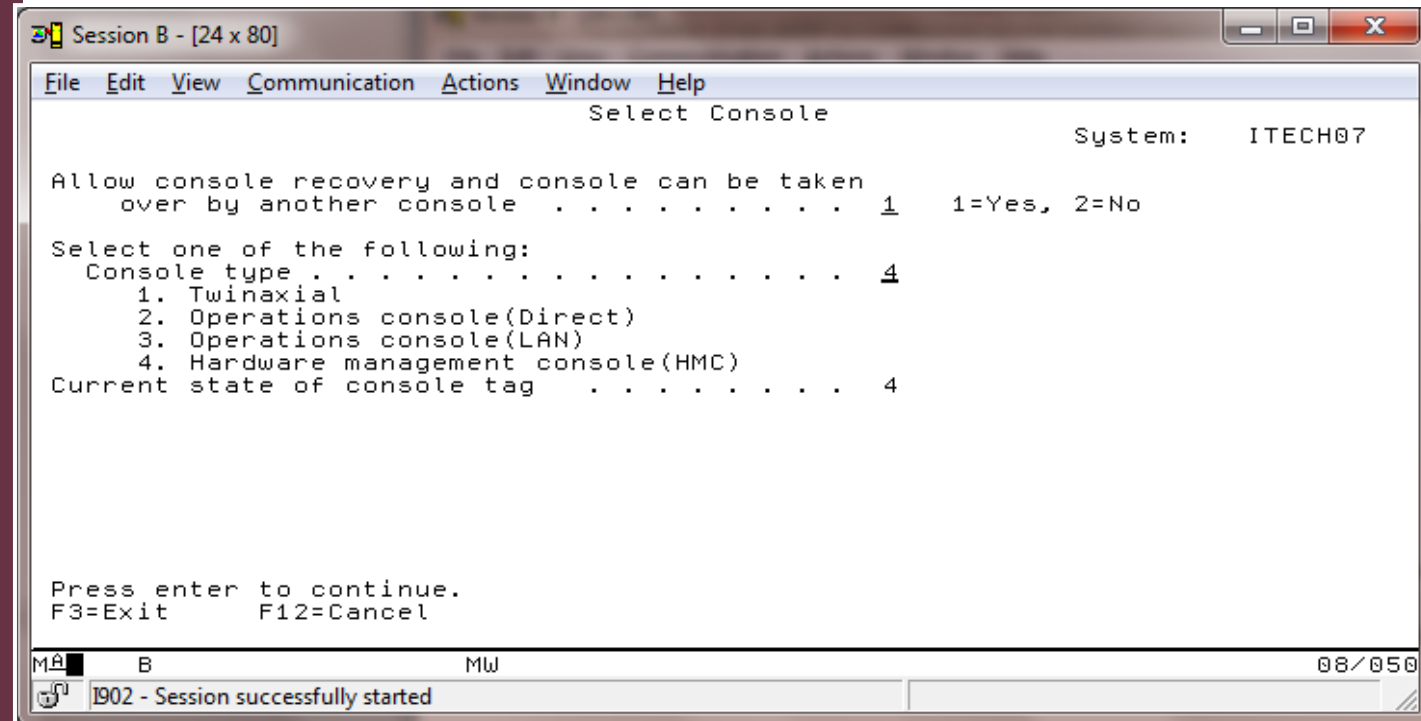
Set Console Type



Select Console



Select YOUR console



ANZOBJCVN – Crossing 6.1 boundary

- Collect the data again and verify that there are NO programs on this report that you expect to run at 6.1 or 7.1 !!!



**Decision
Point**



Stop

What we will cover...

Map, starting, and documentation

Analyze Object Conversion

Release Mapping

HMC, FSP, firmware, & IBM i

Models

Required PTFs, Resaves, and License Keys

Image Catalogue & Preparing

Right before the upgrade

The Upgrade

Verification

Conversions & Afterwards

If Using two-phase Commit

Session B - [24 x 80]

File Edit View Communication Actions Window Help

Work with Commitment Def (WRKCMTDFN)

Type choices, press Enter.

Job name	*all	Name, *, *ALL
User		Name
Number		000000-999999
Status	*resync	*ALL, *PENDING, *RESYNC...
ASP group	*ALLAVL	Name, *ALLAVL, *SYSBAS
Logical unit of work ID	*ALL	

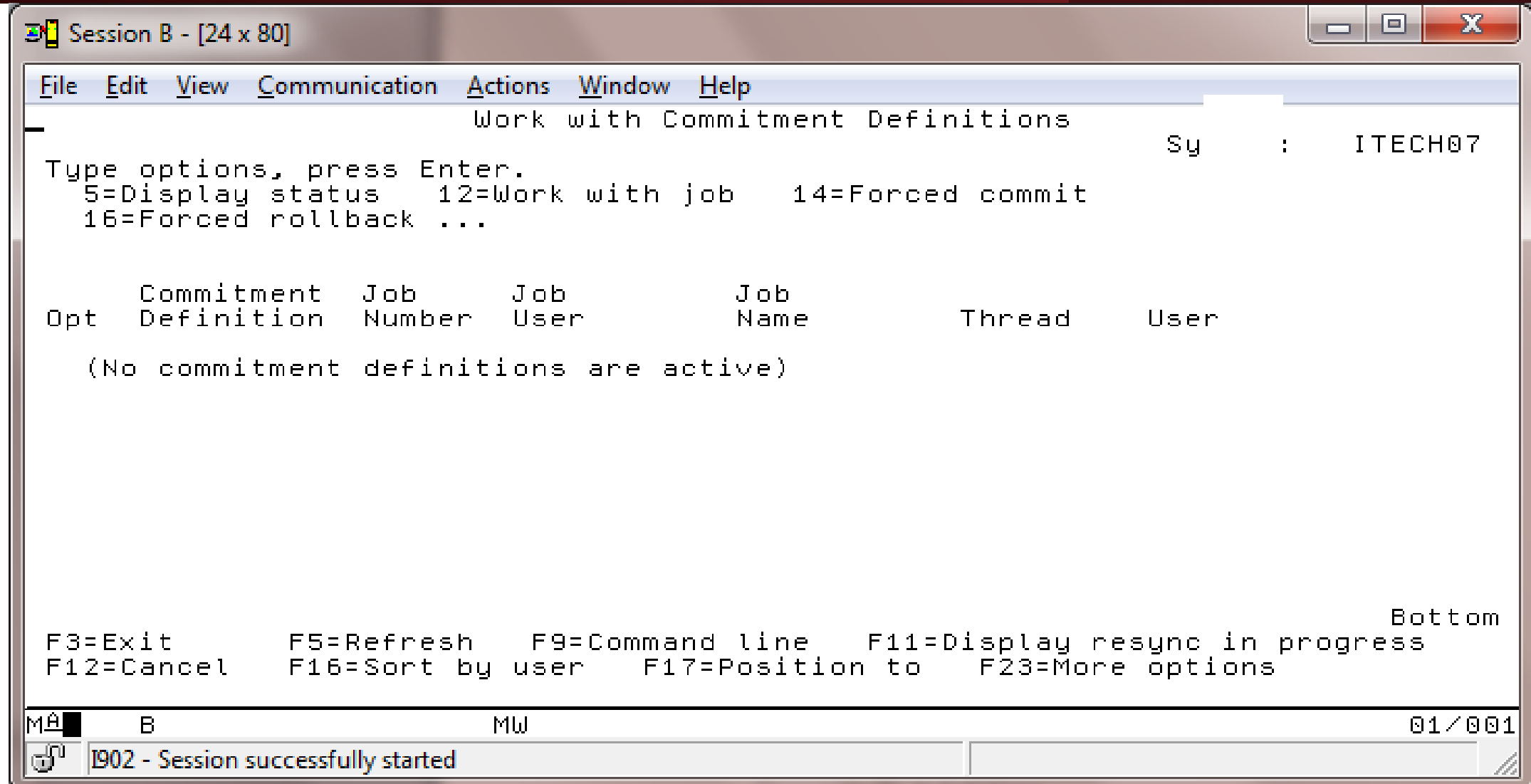
Output	*	*, *PRINT
------------------	---	-----------

F3=Exit F4=Prompt F5=Refresh F10=Additional parameters F12=Cancel Bottom
F13=How to use this display F24=More keys

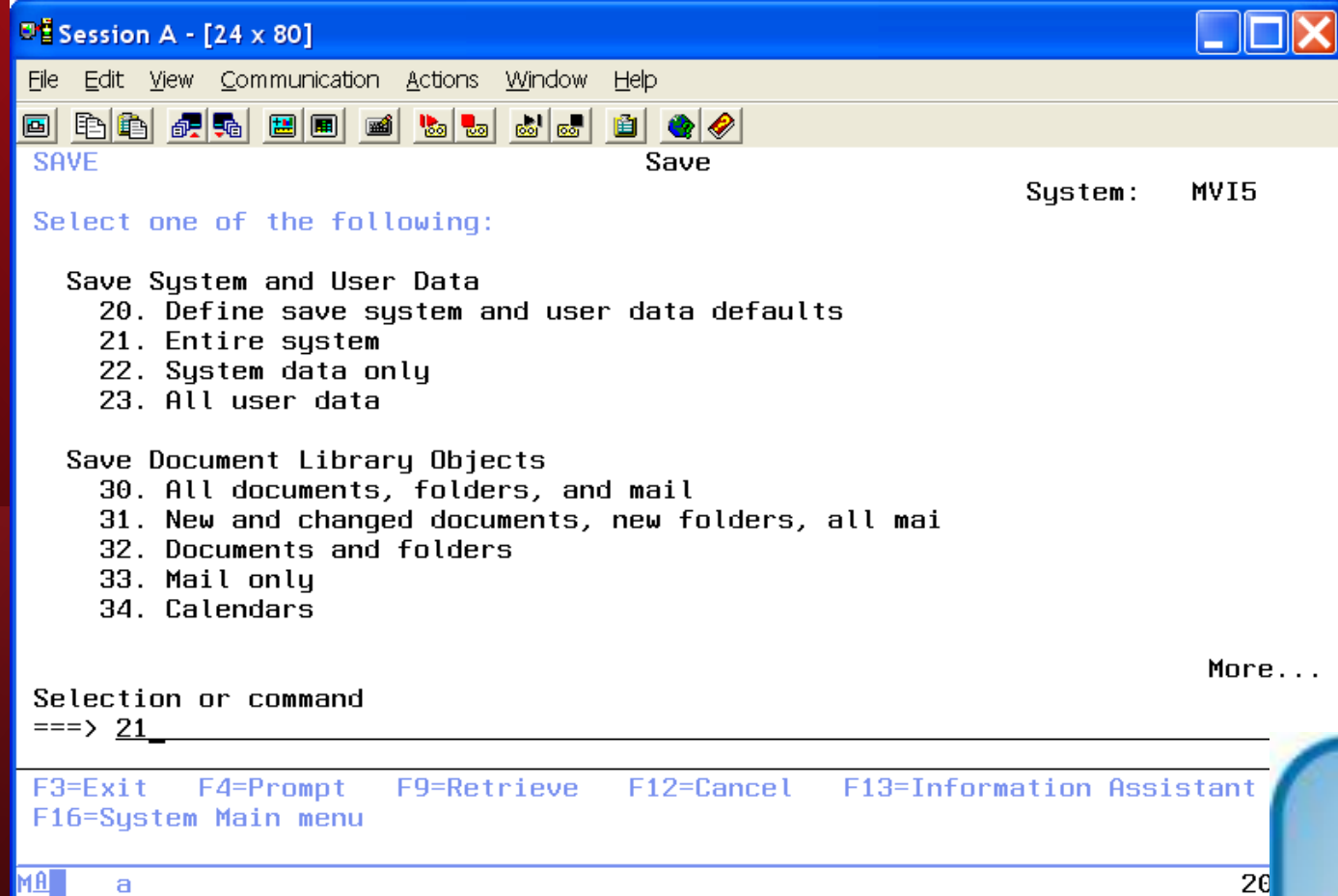
MÄ B MW 08/044

1902 - Session successfully started

No Commitment Definitions

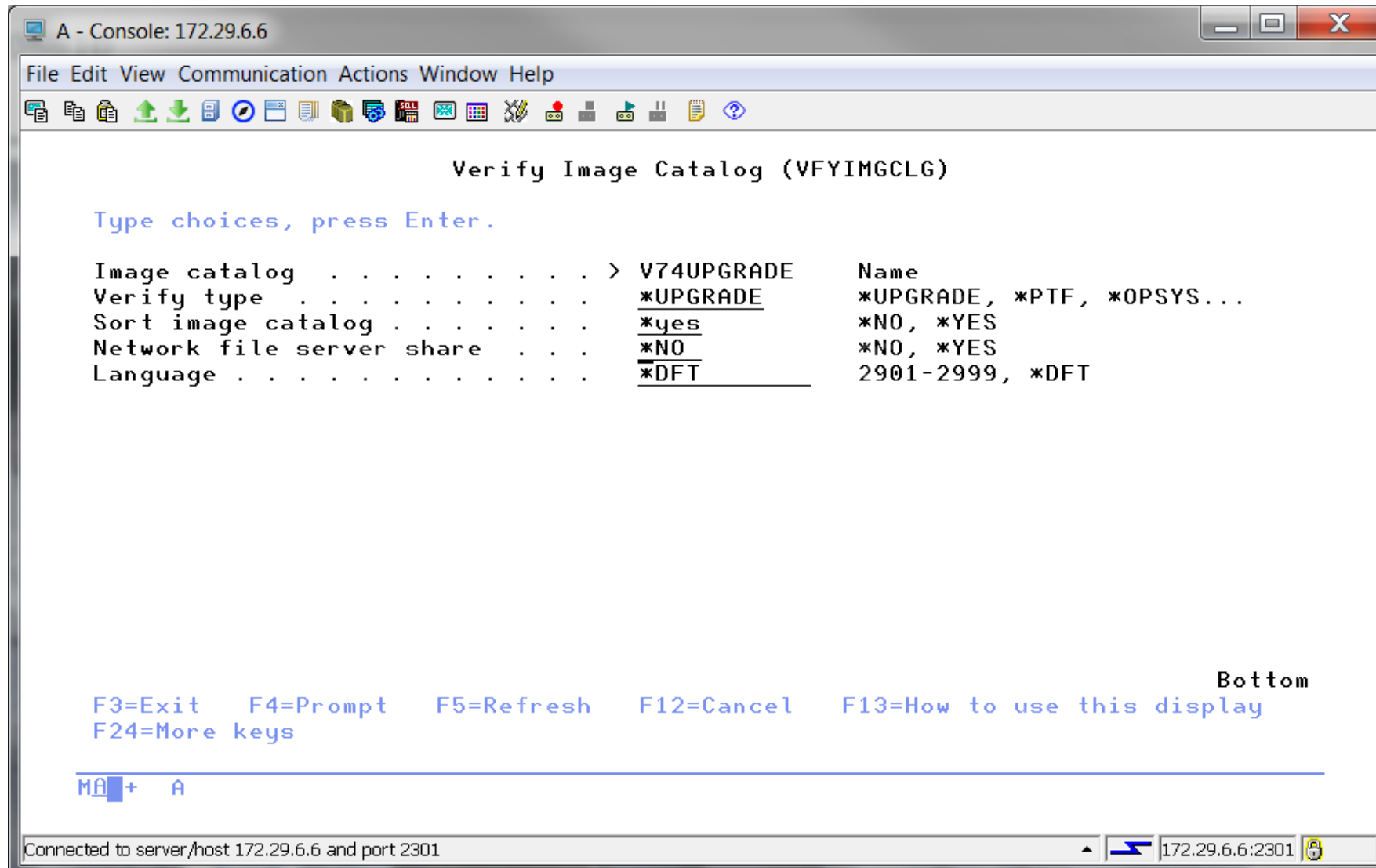


**Most
important
Step – FULL
SAVE (21 or
BRMS)**



**Don't
Forget**

Verify for Upgrade



NOT Good

```
Session B - [24 x 80]
File Edit View Communication Actions Window Help
Work with Image Catalogs
System: ITECH07
Type options, press Enter.
1=Create 2=Change 4=Delete 8=Load 9=Unload 10=Verifu
12=Work with entries

Opt Image Status Type ASP Device Device
Catalog Status Threshold Device Status
10 V72UPGRADE Ready Optical *CALC OPTVRT01 Active

F3=Exit F5=Refresh F11=View descriptions F12=Cancel
Verification for image catalog V72UPGRADE failed.
MA B MW 09/002
1902 - Session successfully started
```


Verified

```
A - Console: 172.29.6.6
File Edit View Communication Actions Window Help
[Icons]
Work with Image Catalog Entries
Catalog . . . : V74UPGRADE      Status . . . : Ready
Type . . . . : Optical         Device . . . : OPTVRT01
System:      ITECH09
Directory . . . . : /a74upgrade
Type options, press Enter.
  1=Add    2=Change    4=Remove    6=Mount    8=Load    9=Unload
 10=Initialize volume 12=Work with volume
Opt  Index  Status  Image File Name
---  ---
  *AVAIL
  1  Mounted  I_BASE_01.740.2100.0000.ISO
  2  Loaded   B_GROUP3_01.740.0080.0001.ISO
  3  Loaded   B_GROUP3_02.740.0080.0001.ISO
  4  Loaded   B_GROUP3_03.740.0080.0001.ISO
  5  Loaded   B_GROUP3_04.740.0080.0001.ISO
  6  Loaded   B_GROUP3_05.740.0080.0001.ISO
  7  Loaded   F2935_01.740.0080.0001.ISO
F3=Exit  F5=Refresh  F6=Load/Unload image catalog  F7=Verify image catalog
F8=Reorder by index  F12=Cancel  F24=More keys
Image catalog V74UPGRADE, type *UPGRADE verified.
MA + A
Connected to server/host 172.29.6.6 and port 2301 172.29.6.6:2301
```



Checkpoint

Bottom

What we will cover...

Map, starting, and documentation

Analyze Object Conversion

Release Mapping

HMC, FSP, firmware, & IBM I

Models

Required PTFs, Resaves, and License Keys

Image Catalogue & Preparing

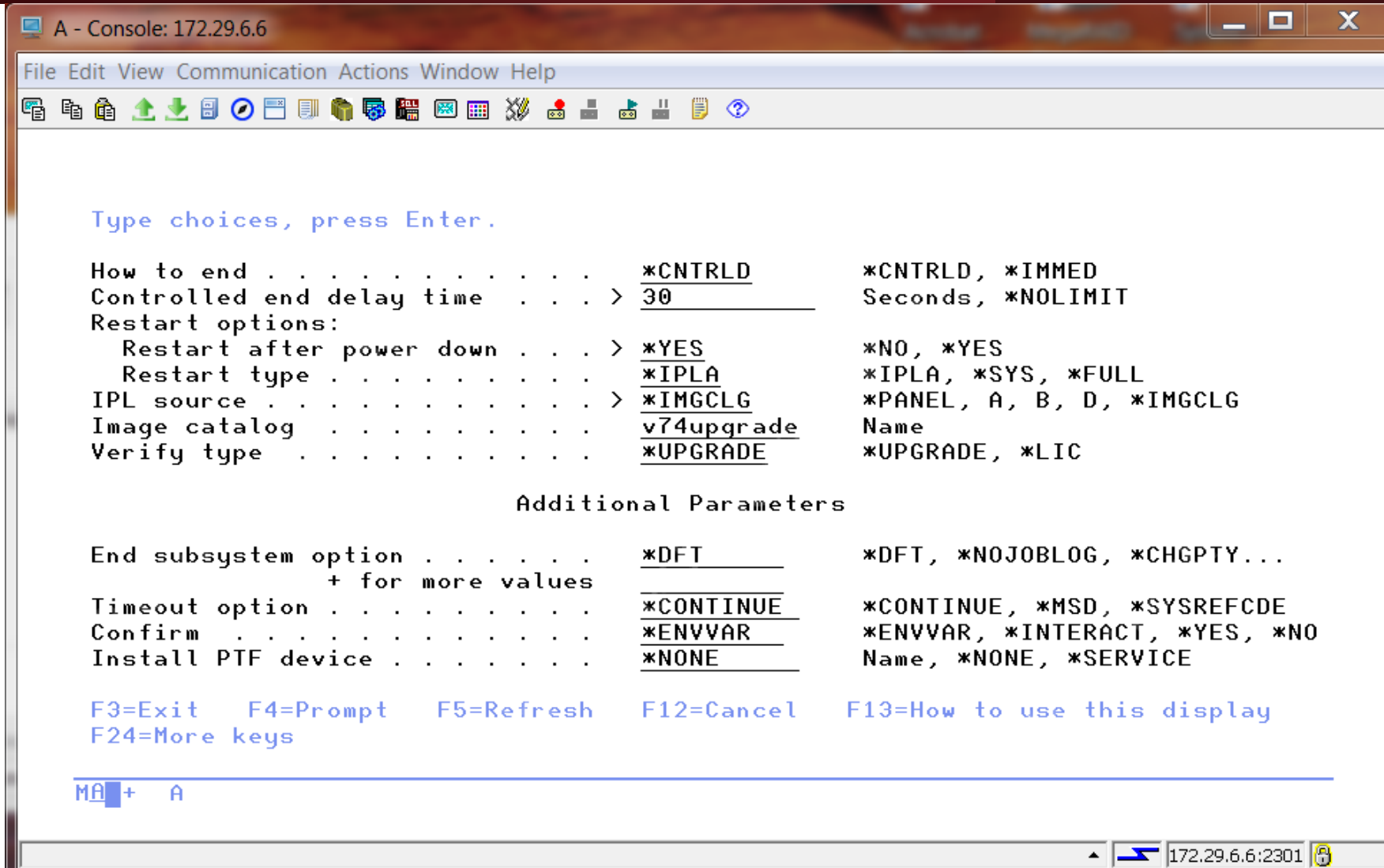
Right before the upgrade

The Upgrade

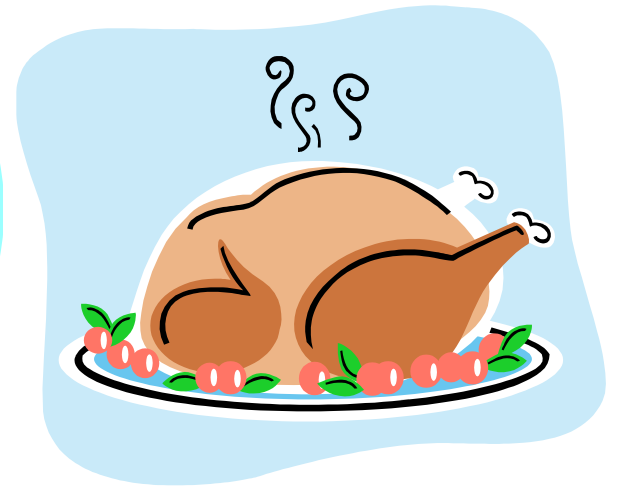
Verification

Conversions & Afterwards

Start the Upgrade



**Sit back and
relax while
Image Catalogs
do the work**



Upgrade moves forward

Actions ▾ Total: 3 Selected: 0

☐	Name		Partition State	Partition ID	IP Address	Attention LED	Reference Code	OS Type	▼
☐	HostP9	i	Running	1	-	Off	00000000	IBMi	
☐	iTech09	i	Running	2	-	Off	C65441CC	IBMi	
☐	iTechData	i	Running	3	-	Off	00000000	IBMi	

◀ ||| ▶

◀ 1 ▶

10 | 20 | 30 | 50

Actions ▾ Total: 3 Selected: 0

☐	Name		Partition State	Partition ID	IP Address	Attention LED	Reference Code	OS Type	▼
☐	HostP9	i	Running	1	-	Off	00000000	IBMi	
☐	iTech09	i	Running	2	-	Off	C69941CC	IBMi	
☐	iTechData	i	Running	3	-	Off	00000000	IBMi	

◀ ||| ▶

◀ 1 ▶

10 | 20 | 30 | 50

Next on the console

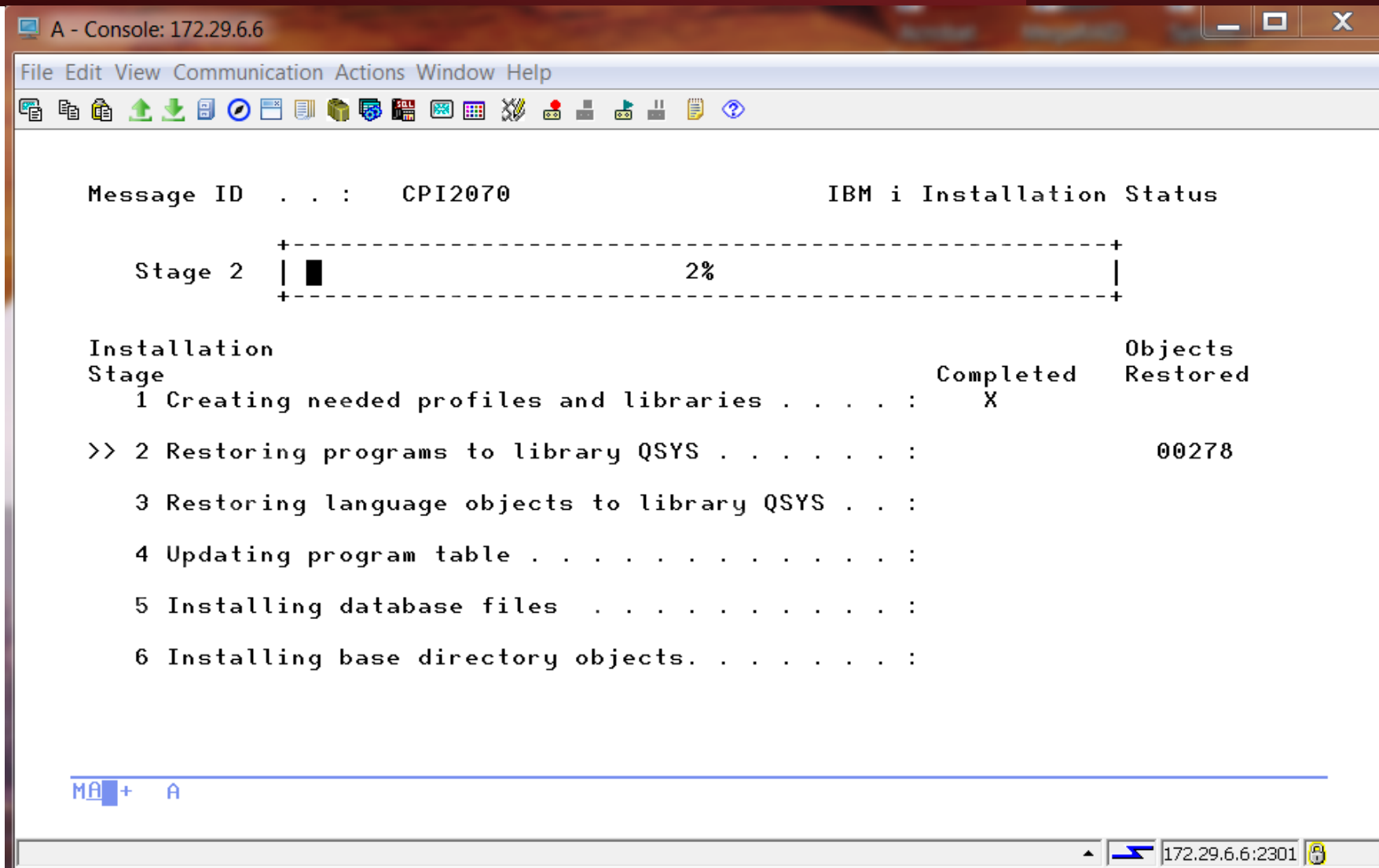
Install Licensed Internal Code - Status

Install of the Licensed Internal Code in progress.

```
          +-----+
Percent  |           XX %           |
Complete +-----+
```

Elapsed time in minutes : x.x

IBM i being installed



Installing Licensed Programs

```
Session A - ITECH05C.ws - [24 x 80]
File Edit View Communication Actions Window Help

Installing Licensed Programs

System: ITECH05

Licensed programs processed . . . . . 16 of 67

Licensed
Program Option Description Type
5770SS1 3 Extended Base Directory Support *PGM
5770SS1 8 AFP Compatibility Fonts *PGM
5770SS1 12 Host Servers *PGM
5770SS1 13 System Openness Includes *PGM
5770SS1 29 Integrated Server Support *PGM
5770SS1 33 Portable App Solutions Environment *PGM
5770SS1 43 Additional Fonts *PGM
5770BR1 *BASE IBM Backup, Recovery and Media Services for i *PGM
5770DG1 *BASE IBM HTTP Server for i *PGM
5761JV1 *BASE IBM Developer Kit for Java *PGM
5770NAE *BASE IBM Network Authentication Enablement for i *PGM
5770TC1 *BASE IBM TCP/IP Connectivity Utilities for i *PGM
More...

Copying temporary files from installation device

01/001
Connected to remote server/host 127.0.0.1 using port 1195
```


What we will cover...

Map, starting, and documentation

Analyze Object Conversion

Release Mapping

HMC, FSP, firmware, & IBM I

Models

Required PTFs, Resaves, and License Keys

Image Catalogue & Preparing

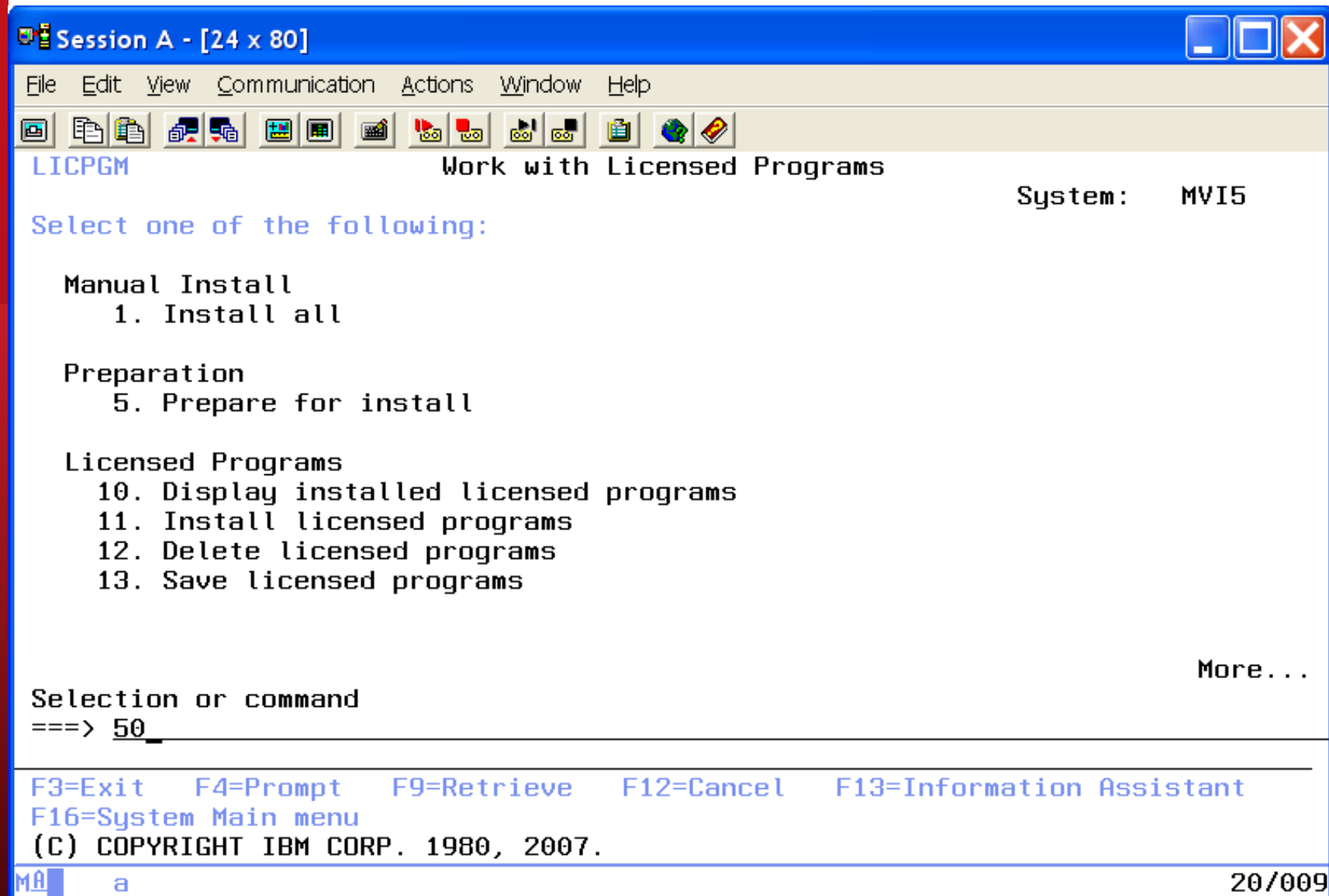
Right before the upgrade

The Upgrade

Verification

Conversions & Afterwards

When Complete Check



Verify Install

display history log contents

Licensed program installation process started.

Library QGPL installed.

Library QUSRSYS installed.

*PGM objects for product 5770JV1 option *BASE release V7R6M0 restored.

*LNG objects for NLV 2924 for product 5770JV1 option *BASE release V7R6M0 res

*PGM objects for product 5770JS1 option *BASE release V7R2M0 restored.

License key information not found.

*PGM objects for product 5770JV1 option 16 release V7R6M0 restored.

*PGM objects for product 5770JV1 option 17 release V7R6M0 restored.

*PGM objects for product 5770JV1 option 21 release V7R6M0 restored.

*PGM objects for product 5770JV1 option 22 release V7R6M0 restored.

*PGM objects for product 5770JV1 option 20 release V7R6M0 restored.

*PGM objects for product 5770PT1 option *BASE release V7R4M0 restored.

License key information not found.

*PGM objects for product 5770QU1 option *BASE release V7R6M0 restored.

License key information not found.

*PGM objects for product 5770PT1 option 2 release V7R4M0 restored.

More..

Press Enter to continue.

=====

Automatic Installation completed



Display History Log Contents

```
*LNG objects for NLV 2924 for product 5770JS1 option *BASE release V7R2M0 res
*PGM objects for product 5770UME option *BASE release V1R4M0 restored.
*LNG objects for NLV 2924 for product 5770UME option *BASE release V1R4M0 res
*PGM objects for product 57330MF option *BASE release V1R7M0 restored.
*LNG objects for NLV 2924 for product 57330MF option *BASE release V1R7M0 res
*PGM objects for product 5733SC1 option *BASE release V7R6M0 restored.
*LNG objects for NLV 2924 for product 5733SC1 option *BASE release V7R6M0 res
*PGM objects for product 5733SC1 option 1 release V7R6M0 restored.
Licensed program installation process completed successfully.
```

Verify

- Check messages in QSYSOPR
- Should not see any license Key messages
- Display LICPGM everything at right release
- Load any Special PTFs first and IPL back to restricted..
- Then load the PTFs (Cumulative, Groups, DB) & then IPL

Multiple IPLs possible

```
A - Console: 172.29.6.6
File Edit View Communication Actions Window Help

Operating System IPL in Progress                                4/16/19  10:54:27

IPL:
  Type . . . . . : Unattended
  Start date and time . . . . . : 04/16/19  10:53:36
  Previous system end . . . . . : Normal
  Current step / total . . . . . : 17   49
  Reference code detail . . . . . : C900 2967  20 51 0060

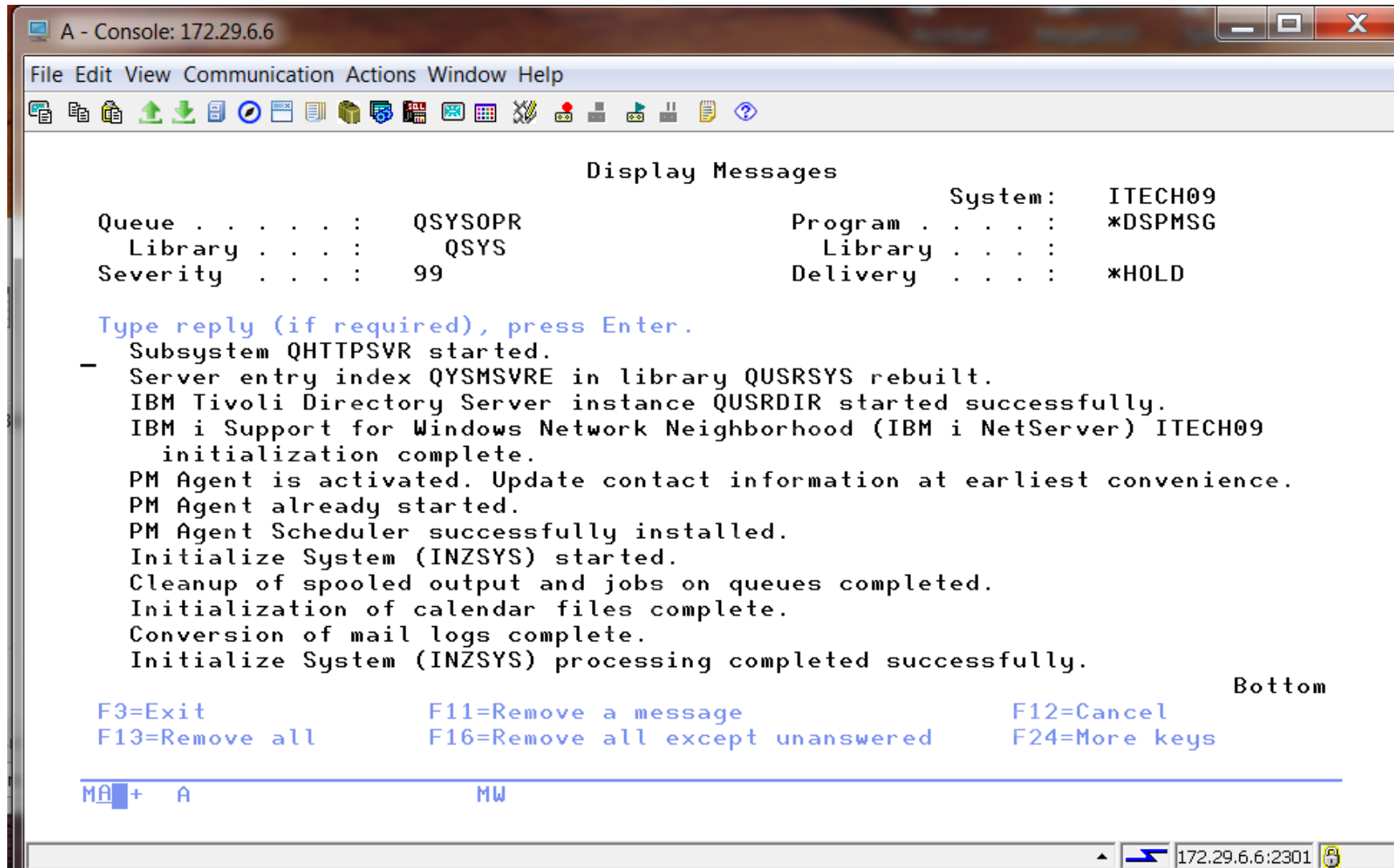
  IPL step                                Time Elapsed   Time Remaining
  Internal journal recovery                00:00:00
  SAG initialization                      00:00:03
> PTF processing                          00:00:30       00:00:02
  Signals initialization
  IPL options

Item:
  Current / total . . . . . : 42       46
  Identifier . . . . . : 5733ARE-SI45537 V1R1M0
  Activity . . . . . : Applying PTFs

Started processing 3000 objects, completed 0 objects.

MA + A MW
172.29.6.6:2301
```

INZSYS Started after First IPL



```
A - Console: 172.29.6.6
File Edit View Communication Actions Window Help

Display Messages

Queue . . . . . : QSYSOPR          Program . . . . . : ITECH09
Library . . . . . : QSYS           Library . . . . . : *DSPMSG
Severity . . . . . : 99             Delivery . . . . . : *HOLD

Type reply (if required), press Enter.
- Subsystem QHTTSPVR started.
  Server entry index QYSMSVRE in library QUSRSYS rebuilt.
  IBM Tivoli Directory Server instance QUSRDIR started successfully.
  IBM i Support for Windows Network Neighborhood (IBM i NetServer) ITECH09
  initialization complete.
  PM Agent is activated. Update contact information at earliest convenience.
  PM Agent already started.
  PM Agent Scheduler successfully installed.
  Initialize System (INZSYS) started.
  Cleanup of spooled output and jobs on queues completed.
  Initialization of calendar files complete.
  Conversion of mail logs complete.
  Initialize System (INZSYS) processing completed successfully.

F3=Exit          F11=Remove a message      F12=Cancel
F13=Remove all   F16=Remove all except unanswered  F24=More keys

MA + A          MW

172.29.6.6:2301
```

INZSYS Completed

```
A - Console: 172.29.6.6
File Edit View Communication Actions Window Help
[Icons]
Display Messages
Queue . . . . . : QSYSOPR          Program . . . . . : ITECH09
Library . . . . . : QSYS           Library . . . . . : *DSPMSG
Severity . . . . . : 99            Delivery . . . . . : *HOLD

Type reply (if required), press Enter.
- Subsystem QHTTSPSVR started.
  Server entry index QYSMSVRE in library QUSRSYS rebuilt.
  IBM Tivoli Directory Server instance QUSRDIR started successfully.
  IBM i Support for Windows Network Neighborhood (IBM i NetServer) ITE
  initialization complete.
  PM Agent is activated. Update contact information at earliest conven
  PM Agent already started.
  PM Agent Scheduler successfully installed.
  Initialize System (INZSYS) started.
  Cleanup of spooled output and jobs on queues completed.
  Initialization of calendar files complete.
  Conversion of mail logs complete.
  Initialize System (INZSYS) processing completed successfully.

F3=Exit          F11=Remove a message      F12=Cancel
F13=Remove all   F16=Remove all except unanswered  F24=More keys

MA+ A          MW
[Icons] 172.29.6.6:2301
```


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Afterwards

- Update System Values that you changed.
- CFGACCWEB2
- Enable Service Director
- Check PM400 (GO PMAGT)
- Performance Data
- Delete Image Catalogues
- Test SNDPTFORD & SNDSRVRQS
- Cleanup PTF Groups WRKPTFGRP
- Update Client Access Clients
- Update IBMi Integrated Windows Servers



Conversions

Session A - [24 x 80]

File Edit View Communication Actions Window Help

Start Object Conversion (STROBJCVN)

Type choices, press Enter.

Option	<u>*CONVERT</u>	*CONVERT, *CHECK
Library	<u>*allusr</u>	Name, *ALLUSR, *NONE
Object type	<u>*pgm</u>	*ALL, *FILE, *ALLPGM, *SQL
ASP device	<u>*</u>	Name, *, *ALLAVL...
Object	<u>*NONE</u>	
Directory subtree	<u>*ALL</u>	*ALL, *NONE

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

MA a

- V6R1 – ALL PROGRAMS



Conversions

- V5R4
 - Data Queues
 - User Queues
 - *FILES
 - SQLPGMs
- 7.3
 - Libraries

SAVE – New starting point

- Full Save if have the time
- Otherwise (GO SAVE 22)
 - SAVSYS
 - SAVLIB *IBM
 - SAV ((' /QIBM/ProdData') (' /QOpenSys/QIBM/ProdData'))





7 Key Points to take home

- ANZOBJCVN, ANZOBJCVN, ANZOBJCVN !!!
- Get the required PTFs on your system before the upgrade.
- Check FSP Firmware minimum levels.
- Have a Good FULL Backup right before the upgrade.
- Have license keys and new PTFs available.
- Conversions need to complete afterwards.
- SAVE 22 or Full save after the conversions.

Questions?

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