



AIX Versioned Workload Partitions



Nigel Griffiths
IBM Power Systems
Advanced Technology Support, Europe

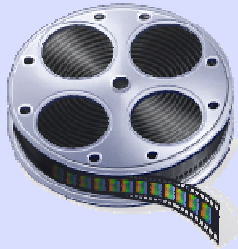
Presentation Version 10

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In a nutshell

- We can move
 - an AIX 5.2 or AIX 5.3 image
 - with their Middleware + Applications
 - inside a special Versioned Workload Partition
 - running on POWER7 and AIX 7
- Marketing name:
 - “AIX 5.2 Workload Partitions for AIX 7, V1.1” (FC 5765-H38)
 - “AIX 5.3 Workload Partitions for AIX 7, V1.1” (FC 5765-WP7)
- Techies call it: Versioned WPAR or VWP
- Going to talk about AIX 5.2 but highlight AIX 5.3 is differences



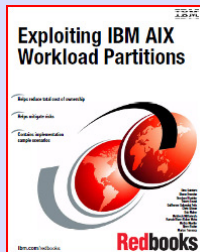


WPAR - the movies!

1. WPAR Theory and Background
2. WPAR Manager Introduction
3. WPAR Mobility/Relocation
4. Create WPAR Simple
5. Create WPAR Detailed
6. Power5 to Power6 Mobility
7. WPAR Full Priority
8. WPAR Command Line
9. Compare Global and WPAR Environment
10. WPAR Backup and Cloning
11. Faster Relocation
12. Static Relocation
13. Director based WPAR Mgr
14. Versioned WPAR ←

Total = 3 Hour Demo

<http://tinyurl.com/AIXmovies>



IBM Redbook
Exploiting IBM AIX Workload Partitions
www.redbooks.ibm.com 390 pages

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 Versioned WPAR AIX 5.2 & 5.3

AIX 5.2 - History Lesson



[my records]

- Oct 2002 - AIX 5.2 released
- Aug 2004 - AIX 5.3 released for POWER5
- mid 2005 - "functionally stabilised" ← my guess
- Mid 2007 - last TL (TL10) released
- Mid 2008 - withdrawn from marketing
- Mid 2009 - Last Service Pack 8

AIX 5.2 - History Lesson

- Aug 2004 - AIX 5.3 released for POWER5
- Mid 2011 - Last Service Pack 12
- April 2012 - Extended Support (price hike)



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 Versioned WPAR AIX 5.2 & 5.3

AIX 5.2 - History Lesson



Why still running on 4 to 10 years old boxes?

- “If it ain’t broke, don’t fix it”
- AIX upgrade to 6 or 7?
“No way man!!”
= retest of newer Middle-ware & App Version & OS

Versioned WPAR offers

- **Same** AIX, **same** Middle-ware & **same** Apps
on a new hardware base with AIX7 features too

Plus a hidden bonus pack ... next slide

Remove older machine & speed boost

Remove the older inefficient machine

1. Reduced electricity & cooling costs
2. Free up rack space
3. Stop hardware maintenance
4. Some old hardware parts are valuable (see eBay!)



5. Boost performance with SMT=4
Assumes thread count can use them
May reduce CPU count = reduced software licences
6. Access to AIX6/7 features
Kernel security, RBAC, WPARs(!),



Workload Partitions – Packaging

Versioned WPAR AIX 5.2 & 5.3
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1. Base WPAR included with AIX 6 / AIX 7

- Basic WPAR functions
- AIX command line access only
- No Live Application Mobility



2. PowerVM Workload Partition (WPAR) Manager

- FC 5765-G83
- Systems Director plug-in
- 60 day trial then buy a licence
- Includes Live Application Mobility (Relocation)
- Version 2.2.1 (10th Sept 2010) understands the below



3. AIX 5.2 and 5.3 Workload Partitions for AIX 7

- Extra product/LPP at a cost
 - AIX 5.2 FC 5765-H38 with limited AIX 5.2 phone and defect support
 - AIX 5.3 FC 5765-WP7 with limited AIX 5.3 phone and defect support
- AIX 5.2 media is **not provided & not available**
- AIX 5.2 TL10 SP8 Update is on Fix-Central = 1.6 GB
- AIX 5.3 TL12 SP4 (or 5) Update is on Fix-Central
 - Earlier version may run but no support
- Supported on **AIX 7 & POWER7** only



Moving to the Versioned WPAR Environment

Versioned WPAR AIX 5.2 & 5.3
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2. Also backup other volume groups

4. Install Versioned WPAR Package (just once)

3. Copy to Global AIX

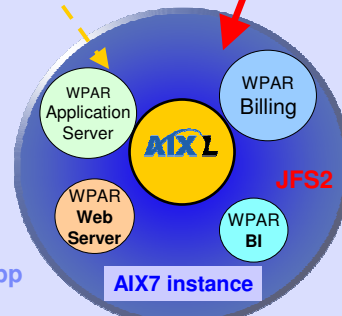
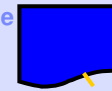
5. Create AIX 5.2/5.3 WPAR
`mkwpar -C -B mksysb-file -l -n fred ...`

6. ... about 15 minutes ...

7. `startwpar fred`

8. `lswpar -t L` (type = Legacy!)

9. Get your other data online & start you app



Practical points

- AIX 5.2 default install mksysb ~ 800MB
- AIX 5.3 default install mksysb ~1700MB

- VWPAR minimum size ~3.5 GB disks space

- Don't forget Versioned WPAR
 - No shared /usr or /opt
 - So more disk space & memory

- Global AIX memory
 - 1 GB just survivable with 1 Versioned WPAR
 - Recommend 4 GB min.

Install time – AIX 5.3 WPAR

- AIX 5.3 install is a little longer than AIX 5.2
- About 10 minutes on local disks
 - Actually these are Thin provisioned Shared Storage Pools disks via VIOS and LUN's !!!
- About 25 minutes on Single SCSI disk
- About 30 minutes on NFS
- These are very untuned disks

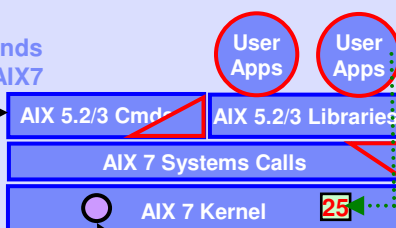
- Don't watch mkwpar command output on the screen
 - Pretty sure the output speed via telnet is limiting factor
 - Redirect to a file and tail -f

AIX 5.2/5.3 WPAR → How do they do that?



AIX 5.2/5.3 WPAR → How do they do that?

300 AIX commands overlay to use AIX7 versions hence private /usr + /opt with overlay like
uname, perfstat, fs, vmstat, lparstat, topas_nmon ...
Much fewer for AIX 5.3



AIX 5.2/3 Apps have no clue its changed

Systems Calls adjusted AIX 5.3=13 & AIX 5.3=5

/dev/kmem 25 symbols support performance tools get stats

Can load some kernel extensions into WPAR

- Also possible to install some
- AIX 5.2 or 5.3 PTFs
 - Interim fixes



Versioned WPARs - Costs

Versioned WPARs are relatively inexpensive

- Ballpark cost?

- GB Pounds list price at the time of creating this slide
- For small machine model = Power 750 & below
- Per core = £55 + £285 three year SWMA**
- Charged per core actually running Versioned WPAR includes limited AIX 5.2 & AIX 5.3 support



**Prices change so ask for a local quote in your currency

AIX 5.2 WPAR faster than AIX 5.3 !

POWER7 Mode with
SMT = 4
So faster* than AIX 5.3!

POWER6 Mode only
Only SMT = off or 2

AIX 5.3 WPAR average
17% faster than AIX 5.3
(if enough threads for
SMT=4)

Native
POWER7 Mode
SMT=0, 2, 4

With optional
POWER6 Mode
for LPM to
older machine



* Application dependant and assumes many active processes/threads

Versioned WPAR implies further AIX versions

- AIX 4.3.3 & AIX 5.1 ruled out as they have never run in an LPAR
- This means it would be costly to develop & there are much lower numbers of users

Summary Versioned WPARs for AIX 5.2/5.3

Summary

For:

- Get AIX 5.2 / 5.3 limited support
- Ditch ancient hardware, free up space
- Lower electricity & HW maintenance
- Move up to the virtual shared everything world
- Avoid Extended AIX 5.3 support costs
- Higher performance

Against:

- Small Cost
- Application support - if vendor supporting at all !



Working with Versioned WPARs

AIX 5.2 Versioned WPAR package

Install the packages once per Global AIX

Supplied on CD/DVD ~40 MB

Installed in seconds with smitty installp

```
# lslpp -L | grep vwp  
vwp.52.rte      AIX 5.2 Versioned WPAR Runtime Environment  
vwp.images.52  Versioned WPAR 5.2 Support Images  
vwp.images.base Versioned WPAR Base Support Images  
vwp.sysmgt     Versioned WPAR Management  
#
```

AIX 5.3 Versioned WPAR package

Install the packages once per Global AIX

Supplied on CD/DVD ~6 MB

Installed in seconds with smitty installp

```
# lslpp -L | grep vwp  
vwp.images.53  1.1.0.0 C F Versioned WPAR 5.3 Support  
vwp.images.base 1.1.1.0 C F Versioned WPAR Base Support  
vwp.sysmgt     1.1.1.0 C F Versioned WPAR Management  
#
```

Creating a Versioned WPARs – command line

Versioned WPAR AIX 5.x mksysb includes /usr & /opt

- So mandatory to have **private /usr & /opt** filesystems
- It is easy to forget the **mkwpar -l** option (lowercase L)
- Default creates local filesystem based on mksysb sizes
- Example: using local disks = no Relocation

```
mkwpar \  
-n wp08 \  
-h wp08 \  
-N interface=en0 netmask=255.255.255.0 address=9.3.2.8 \  
-r \  
-C -B my_mksysb_from_AIX52_TL10_SP8_box \  
-l  
# New options for Versioned WPAR & mksysb file  
# Additions for private /usr + /opt which are mandatory with versioned WPAR
```

- Recommend: redirect output to a file then use tail -f outfile

Creating a NFS mounted Versioned WPARs

Versioned WPAR AIX 5.3 mksysb includes /usr & /opt & relocation (-c)

```
mkwpar \  
-n wp08 \  
-h wp08 \  
-N interface=en0 netmask=255.255.255.0 address=9.3.2.8 \  
-r \  
-C -B my_mksysb_from_AIX52_TL10_SP8_box \  
-l \  
-M directory=/      vfs=nfs host=nfs.acme.com dev=/nfs/wp08root \  
-M directory=/opt   vfs=nfs host=nfs.acme.com dev=/nfs/wp08opt \  
-M directory=/usr   vfs=nfs host=nfs.acme.com dev=/nfs/wp08usr \  
-M directory=/home  vfs=nfs host=nfs.acme.com dev=/nfs/wp08home \  
-M directory=/tmp   vfs=nfs host=nfs.acme.com dev=/nfs/wp08tmp \  
-M directory=/var   vfs=nfs host=nfs.acme.com dev=/nfs/wp08var \  
-c  
# New options for Versioned WPAR & mksysb file  
# Additions for private /usr + /opt which are mandatory with versioned WPAR
```

Which WPAR are Versioned ?

```
# lswpar
Name State Type Hostname Directory RootVG WPAR
```

```
-----
wp07 A S wp07 /wpars/wp07 no
wp09 A S wp09 /wpars/wp09 no
wp11 D S wp11 /wpars/wp11 no
```

```
# lswpar -t L
```

```
Name State Type Hostname Directory RootVG WPAR
```

```
-----
wp07 A S wp07 /wpars/wp07 no
wp09 A S wp09 /wpars/wp09 no
```

```
# lswpar -L wp09
```

```
=====
wp08 - Active
=====
```

```
GENERAL
```

```
Type: S
RootVG WPAR: no
Owner: root
Hostname: wp09
WPAR-Specific Routing: no
Directory: /wpars/wp09
Start/Stop Script:
Auto: no
Private /usr: yes
Checkpointable: yes
Application:
OStype: 1
```

```
0 =regular WPAR
1 =AIX 5.2
1024=AIX5.3
```

Versioned

WPAR Manager GUI for VWPAR

Workload Partition Manager

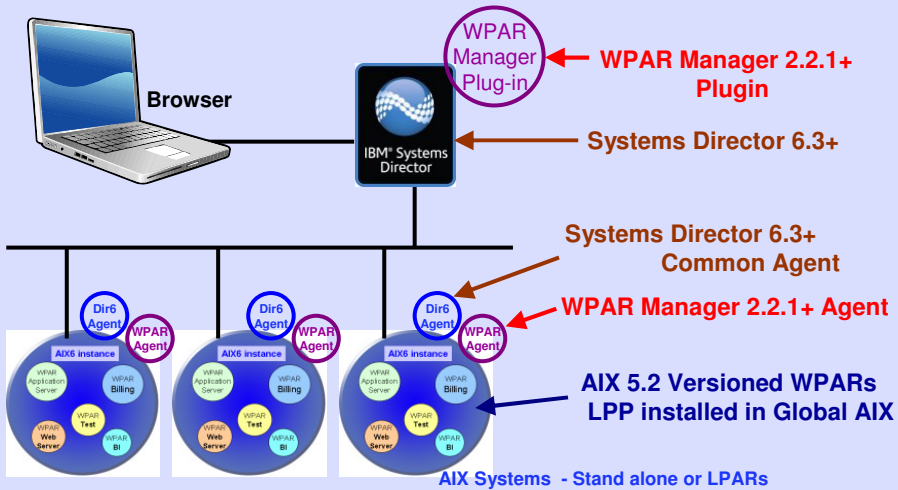
- Graphical User Interface
- a Systems Director plug-in

Recommended:

- If you have more than a dozen or so WPARs to get visibility & simpler operations
- This supports Versioned WPARs

Workload Partitions Manager (WPAR)

- Cross System Management for Workload Partitions
- Live Application Mobility, Automatic Policy-based Relocation



Advanced Notes on Versioned WPARs Systems Director WPAR Manager 2.2.1

Versioned column shows AIX version

Workload Partitions and Hosts (View Members)

Se...	Name	WP...	W...	C...	r...	Versioned	A...	Pro...	CPU...	Memor...
<input type="checkbox"/>	bronze3.aixnc...						OK	OK	16.66	100
<input type="checkbox"/>	wp13	System	Active	True	False		OK	OK	0	1.9
<input type="checkbox"/>	wp27	System	Tran...	True	False		OK	OK	0.01	1.92
<input type="checkbox"/>	wp28	System	Active	True	False		OK	OK	0	1.87
<input type="checkbox"/>	wp29	System	Active	True	False		OK	OK	0.01	1.83
<input type="checkbox"/>	bronze4.aixnc...						OK	OK	12.7	100
<input type="checkbox"/>	wp25	System	Active	True	False		OK	OK	0	2.48
<input type="checkbox"/>	diamond5.aixnc...						OK	OK	7.84	100
<input type="checkbox"/>	wp02	System	Active	False	False	-	OK	OK	0	3.49
<input type="checkbox"/>	wp03	System	Active	True	False	5.2	OK	OK	0.01	3.35
<input type="checkbox"/>	wp06	System	Active	False	False	5.2	OK	OK	0	3.41
<input type="checkbox"/>	diamond6.aixnc...						OK	OK	8	100
<input type="checkbox"/>	wp04	System	Defined	True	False	-	OK	OK		
<input type="checkbox"/>	wp05	System	Active	True	False	-	OK	OK	0.01	1.4
<input type="checkbox"/>	wp08	System	Active	True	False	5.2	OK	OK	0	6.1

Advanced Notes on Versioned WPARs Workload View

LPAR & WPAR Performance stats
CPU Utilisation & Memory use
Note: idle WPAR uses very little CPU

Workload Partitions and Hosts (View Members)

Se...	Name	WP...	W...	C...	r...	Versioned	Ac...	Pro...	CPU...	Memor...
<input type="checkbox"/>	bronze3.aixncc...						<input checked="" type="checkbox"/>	OK	16.66	100
<input type="checkbox"/>	wp13	System	Active	True	False		<input checked="" type="checkbox"/>	OK	0	1.9
<input type="checkbox"/>	wp27	System	Tran...	True	False		<input checked="" type="checkbox"/>	OK	0.01	1.92
<input type="checkbox"/>	wp28	System	A...				<input checked="" type="checkbox"/>	OK	0	1.87
<input type="checkbox"/>	wp29	System	A...				<input checked="" type="checkbox"/>	OK	0.01	1.83
<input type="checkbox"/>	bronze4.aixncc...						<input checked="" type="checkbox"/>	OK	12.7	100
<input type="checkbox"/>	wp25	System	A...				<input checked="" type="checkbox"/>	OK	0	2.48
<input type="checkbox"/>	diamond5.aixnc...						<input checked="" type="checkbox"/>	OK	7.84	100
<input type="checkbox"/>	wp02	System	A...				<input checked="" type="checkbox"/>	OK	0	3.49
<input type="checkbox"/>	wp03	System	A...				<input checked="" type="checkbox"/>	OK	0.01	3.35
<input type="checkbox"/>	wp06	System	Active	False	False	5.2	<input checked="" type="checkbox"/>	OK	0	3.41
<input type="checkbox"/>	diamond6.aixnc...						<input checked="" type="checkbox"/>	OK	8	100
<input type="checkbox"/>	wp04	System	Defined	True	False	-	<input checked="" type="checkbox"/>	OK	0.01	1.4
<input type="checkbox"/>	wp05	System	Active	True	False	-	<input checked="" type="checkbox"/>	OK	0.01	1.4
<input type="checkbox"/>	wp08	System	Active	True	False	5.2	<input checked="" type="checkbox"/>	OK	0	6.1

vWPAR & any private /usr & /opt WPAR take up more memory = not sharing binaries with the global AIX

Create Versioned WPARs on GUI

Workload Partitions and Hosts (View Members)

Se...	Name	WP...	W...	C...	r...	Versioned	Ac...	Pro...	CF
<input type="checkbox"/>	bronze3.aixncc...						<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	wp13	System	Active	True	False		<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	bronze4.aixncc...						<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	wp25	System	Active	True	False		<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	diamond5.aixnc...						<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	wp02					-	<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	wp03					-	<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	wp06					5.2	<input checked="" type="checkbox"/>	OK	
<input checked="" type="checkbox"/>	diamond6.aixnc...						<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	wp04					-	<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	wp05					-	<input checked="" type="checkbox"/>	OK	
<input type="checkbox"/>	wp08					5.2	<input checked="" type="checkbox"/>	OK	

Select POWER7 running AIX7 LPAR then Right Click

New option

Create Versioned WPARs on GUI

Versioned WPAR
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Create a Versioned Workload Partition

- ✓ Welcome
- ✓ General
- ➔ **Version**
- Devices
- Filesystems
- Options
- Network
- Routing
- Security
- Resource controls
- Advanced settings
- Summary

Version Information

Specify the location of images and files needed to create this versioned workload partition.

*Root of image repository on managed system:
 Load

Select a file containing mksysb image:

Se...	Name	Location	Date
<input type="radio"/>	52cre52s.tar	/home/fixes	Nov 5, 2010 3:56:08 PM
<input checked="" type="radio"/>	mksysb_5200-10-08-...	/home	Oct 5, 2010 5:08:02 PM
<input type="radio"/>	cd.GOLD_VWPAR.iso	/home	Oct 5, 2010 1:33:24 PM
<input type="radio"/>	makewpar_wp07	/home	Oct 27, 2010 11:50:00 AM
<input type="radio"/>	makewpar_wp08	/home	Oct 12, 2010 12:28:11 PM
<input type="radio"/>	.toc	/home/fixes	Nov 5, 2010 4:18:34 PM
<input type="radio"/>	makewpar_wp09	/home	Oct 8, 2010 9:39:56 PM
<input type="radio"/>	U834870.bff	/home/fixes	Apr 8, 2010 8:42:50 PM

Page 1 of 3

*Location of install image files:

Location of the mksysb then click Load

/home

Select the mksysb file

One new step

Otherwise the same as other WPARs ...

Create Versioned WPARs on GUI

Versioned WPAR AIX 5
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Create a Versioned Workload Partition

- ✓ Welcome
- ✓ General
- ✓ Version
- ✓ Devices
- ➔ **Filesystems**
- Options
- Network
- Routing
- Security
- Resource controls
- Advanced settings
- Summary

Filesystems

Specify filesystem options for this versioned workload partition.

Select whether to use or ignore the filesystems defined in the mksysb image for this WPAR. If you select Use filesystems, you may also add filesystems to the table. If you add a filesystem to the table that has the same name as a filesystem in the image, the filesystem definition from the table will be used. If you select Ignore definitions, then click the Configure required filesystems button to define all filesystems to be used for this WPAR.

Use filesystem definitions from the mksysb image
 Ignore filesystem definitions from the mksysb image

Configure required filesystems

Add	View	Remove	Select	Directory	Device	Filesystem ...	NFS Host	Mount opti...

Use filesystem definitions from the mksysb image

Except: Warning that filesystems details can be taken from the mksysb file or overridden here.

Note: /usr & /opt will be private copies.

Versioned WPAR
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Create Versioned WPARs on GUI

Create a Versioned Workload Partition

- ✓ Welcome
- ✓ General
- ✓ Version
- ✓ Devices
- ✓ Filesystems
- ✓ Options
- ✓ Network
- ✓ Routing
- ✓ Security
- ✓ Resource controls
- ➔ **Advanced settings**
- Summary

Advanced settings

Specify the additional settings for this versioned workload partition.

Relocation Compatibility Kernel Extensions **Versioned**

Versioned WPARs:

JFS expansion factor (range = 1 - 8, where 8 is maximum expansion):

1

Create Versioned Workload Partition wiza...

ibm.com <https://purple2.aixncc.uk.ibm.com:8422/help/topic/com.ibm>

Version

JFS expansion factor

Specify the expansion factor to be applied to the size of any compressed JFS file systems contained in the mksysb image that the Workload Partition will be created from. Any JFS file system will be converted to JFS2, which does not support compression. To enable the content of a compressed file system to fit into a JFS2 file system that is not compressed, an expansion factor may be specified to multiply the size of the file system. Valid values are integers from 1 to 8. The default value is 1, which does not result in any change in the file system.

Except: New Versions tab on Advanced Settings
JFS → JFS2 & may have to allow for uncompressing the files

< Back Next > Finish Cancel

Versioned WPAR AIX 5.2 & 5.3
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Further Information

Versioned WPARs are System type

A Workload Partition can be:

- System type – persistent like mini copy of AIX
- Application type – created around a single command

Versioned WPARs are System type

You can't "syncwpar" Versioned WPARs

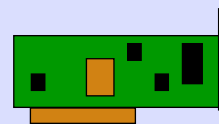
- They are not the same AIX version as the Global AIX
- Normally, it makes the WPAR match the Global AIX

2

Limitations - Only due to Adapter non-support

AIX 5.2 does not support current adapters

- For example: Fibre Channel, 10 Gbit Ethernet
- So no adapters in a Versioned WPAR



AIX 7 does not support old adapters

- For example: Token Ring!
- Generally, VIOS + Global AIX isolate the WPARs from physical adapters for flexibility = a good thing
- Keep adapters in VIOS or Global AIX levels

▪ Other WPAR features just work as normal WPAR

4

Don't forget to first get to the right TL levels

Trying a Versioned WPAR is simple

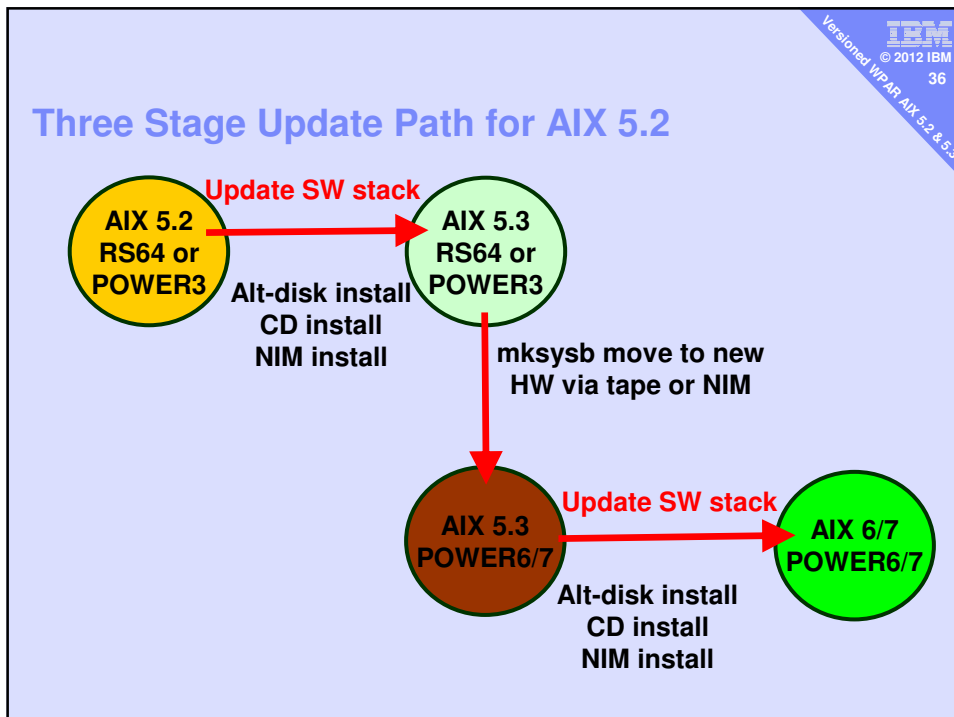
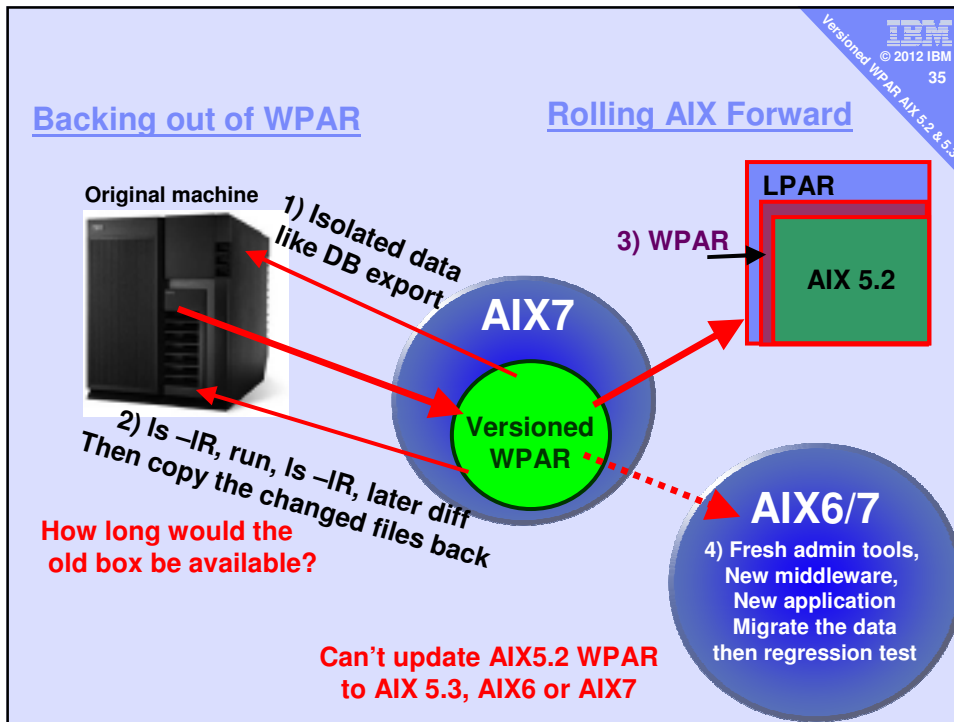
So you have AIX 5.2 or AIX 5.3 running ... just "give it a try"!

1. Probably have mksysb backups
 - If not: NFS mount Global AIX 7 disk space & run mksysb
 2. Do you know all the server connections?
 - What other servers it "talks" too or supplies data too?
 3. Decide disk devices and data protection:
 - Local disks, NFS, VIOS vSCSI, filesystem on LUN, rootvg LUN
 - AIX Mirror, VIOS Mirror, RAID5 in H/W, disk subsystem based
 4. WPAR will have a different IP address = safe
 5. Start it up & run a quick Regression Test
 - Does the middleware & applications start OK? Can you connect?
 - Remote connections, NFS, data load etc.
 - Check admin support: backup, monitoring, scripts, escalation, logs etc.
- Issues like missing kernel extensions will be obvious

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Advanced Notes

Backing out or Rolling Forward from Versioned WPARs



Demo:

AIX 5.2 Suggestions for what to look at

1. `oslevel -s` → 5200-10-08-0930
2. `uname -n` (hostname), `-vr` ("2 5"=AIX5.2) `-u` (serial no)
`-M` (model) `-L` (LPAR No+Name) `-W` (WPAR=1)
3. `ifconfig -a` → As set in `mkwpar` command
4. `hostname` → As set in `mkwpar` command
5. Root prompt might have old machine name - shell's PS1
6. `lsconf` → no serial number, CPU type, GHz
but can see POWER7 & its firmware level
7. `ls /usr` → subtle difference AIX 5.2 ↔ 7.1
8. `topas` → AIX 5.2 = Not found, never released.
`/nre/usr/bin/topas` – fails to run (it's the AIX 7 binary)
9. `nmon` not in AIX. `Nmon Classic=nmon12e_aix527`
 - Monitoring inside WPAR is dumb as you can't see other WPARs
10. Run a AIX 5.2 (oracle 8!) – rather boring!

AIX 5.3 Suggestions for what to look at

1. `oslevel -s` → 5300-12-03-1107
2. `uname -n` (hostname), `-vr` ("3 5"=AIX5.3) `-u` (serial no)
`-M` (model) `-L` (LPAR No+Name) `-W` (WPAR=13)
3. `ifconfig -a` → As set in `mkwpar` command
4. `hostname` → As set in `mkwpar` command
5. Root prompt might have old machine name - shell's PS1
6. `lsconf` → no serial number, CPU type, GHz
but can see POWER7 & its firmware level
7. `ls /usr` → subtle difference AIX 5.2 ↔ 7.1
8. `topas` → yes its there as part of AIX 5.3 TL12
`/nre/usr/bin/topas` – fails to run (it's the AIX 7 binary)
9. `nmon` part of AIX 5.3 TL12
 - Monitoring inside WPAR is dumb as you can't see other WPARs
10. Run AIX 5.3 only app – hard to find! Older version perhaps!

Advanced Notes

Access to AIX 5.2

If you have AIX 5.2 running

- mkysyb & WPAR create is simple & straightforward
- Creates takes about 20 minutes each on my machines



AIX 5.2 media is NOT available

- No download & not orderable



If you don't have AIX 5.2 already

- Why are you reading this? 😊
- You can't run AIX 5.2 nor Versioned WPARs

Applications that will NOT work

Applications that need:

- direct communications adapters or
- adapters are no longer supported

Examples

- Multiport Async
- X25
- Token Ring
- Graphics Adapter (as in a Workstation environment)

Versioned WPAR Relocation – Live Application Mobility

- Live Partition Mobility for AIX 5.2 = not possible
- Live Application Mobility is Available
 - Needs WPAR Mgr software to enable LPM
 - Needs Versioned WPAR LPP installed on target
 - Need to include a few AIX updates in the vWPAR
 - Look for:
 - U834870.bff
 - U834872.bff
 - U834874.bff
 - U834876.bff
 - U834871.bff
 - U834873.bff
 - U834875.bff
 - U834877.bff
 - As normal: source & target processors must match otherwise use Static Relocation



AIX 5.2 WPAR Relocation - YES
 AIX 5.2 Live Partition Mobility - No

<http://www.ibm.com/support/techdocs/atsmastr.nsf/WebIndex/FLASH10737>

HACMP
 now supported
 for AIX 5.2 WPAR
 from the Global level.
 WPAR looks like a
 resource group.

AIX 5.3 WPAR
 support soon!

Techdocs Library > Flashes >

PowerHA SystemMirror support for 5.2 WPARs

Document Author: Shawn Bodily Document ID: **FLASH10737**
 Doc. Organization: Advanced Technical Skills Document Revised: 02/02/2011
 Product(s) covered: PowerHA SystemMirror

Abstract: IBM PowerHA SystemMirror for AIX* V6.1 and V7.1 for AIX V7.1 add support for IBM AIX 5.2 Workload Partitions for AIX V7 (Compatibility WPARs).

IBM PowerHA SystemMirror for AIX V6.1 and V7.1 adds Support for IBM AIX 5.2 Workload Partitions for AIX V7.1
 January 21, 2011
 IBM PowerHA SystemMirror for AIX* V6.1 and V7.1 for AIX V7.1 add support for IBM AIX 5.2 Workload Partitions for AIX V7 (Compatibility WPARs).
 It is recommended to obtain the latest service updates for this support.
 Please refer to the following information for support details. The specified levels, or later, are required for this support.

PowerHA SystemMirror	AIX
PowerHA V7.1, SP2 PowerHA APAR IZ90890	AIX 7.1 TL0 SP2 RSCT V3.1.0.0
PowerHA APAR IZ91056	AIX APAR IZ91004*
PowerHA V6.1, SP3	AIX V7.1 TL0 SP2 RSCT V3.1.0.0 AIX APAR IZ91004*