





## The "Key" to IBM i Licensing and more - Part1

Starting at 10:00 am UK time by Andy Fellows



Smart Meeting → Put questions into the Chat box or AT&T Toll Free phone for better audio • 0800-368-0638 = UK Toll Free

- 0203-059-6451 = UK but you pay for the call
- Then 6403785# Participant Code
- Other countries see chat box for the website
- Please Mute with \*6



#### **Previous Sessions:**

POWER8 E870 from exper Linux on Power: Best Pract Linux for AIX/IBM i guys PowerKVM Deep Dive More Tricks Power Masters Power8 from hands-on Power up your Linux PowerVC PowerVP

**Best Practices** 

SSP4

Tricks of Power Masters

And more.....

#### Future Sessions →

- Feb 11th The "Key" to IBM i Licensing and more Part2
- Mar 4th HMC 8.20 User Interface Tech Preview
- Suggestions Welcome



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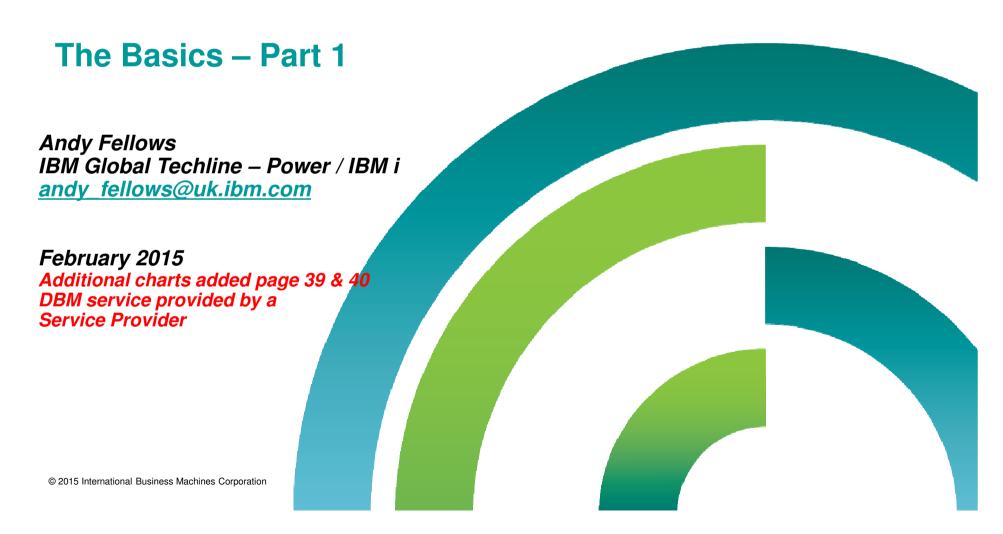
Website: http://tinyurl.com/PowerSystemsTechnicalWebinars

Youtube Channel: http://tinyurl.com/IBMPowerVUGYoutubeChannel





## IBM i Licensing: Navigating the World of IBM i Software







#### Acknowledgements

- I would like to express my sincere thanks to the my IBM colleagues who have contributed to the information that I will be presenting today and next week:
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- Data is subject to change without notice.
   Information correct as of the date of delivery 04 February 2015





## Agenda

- Basic Concepts
- Basic Rules
- CBU and DR machines additional charts on page 39 & 40 added for DBM provided by Service Provider
- Session 44
- Temp Keys & Transfers & Days, oh my!
- IBM i per processor / user entitlement transfers
- Introduction to the My Entitled Systems Support website aka ESS website





#### Now available... but limited information at the moment

IBM i Licensing portal page on ibm.com:

Watch www.ibm.com/systems/support/planning/ibmi license.html





#### Documentation, links. e.g.:

- Link to IBM i Licensing Tech Talks
- Temp key process for CBU/Backup Machines (changes coming!)
- IBM i Entitlement Transfer
- IBM i Relocation
- Capacity Backup (CBU)
- Licensing Designated Backup Machines for client and service providers
- Link to IBM Product License Agreements
- and more...





#### IBM i Software

- There are three types of software on IBM i (from the perspective of this presentation)
  - IBM i the operating system
  - Licensed Program Products (LPPs)
    - DB2 WebQuery
    - BRMS
    - IBM i Access (Client Access)
    - Etc
  - Other products
    - Power Software
      - PowerVM, PowerHA, etc
    - SWG products
      - WebSphere MQ, Rational Tools, etc
    - ISV Software
      - SAP, Infor, etc





#### The Basics

- IBM i licensing is based on hardware model
  - One IBM i license required per core (plus users on machines where applicable: P05, P10)
    - Also referred to as an "entitlement"
- Three machine size groups as per other Power Hardware platforms Small, Medium and Large
- For IBM i, there are also processor groups (aka "software tiers") which map to machine sizes:
  - Small processor groups P05/P10/P20
  - Medium processor group P30
  - Large processor group P50

NOTE: P05 and P10 are priced per processor plus users

All of these tiers are also mapped to IBM i transfer groups (only used for transfer offerings – to be covered in Session 44)





## IBM i Licensing – The Basics

	Model
Large	795, 780
Medium	770, 760 , E870 , E890
	\$824 750, 740, 730
Small	PureFlex/Flex: p260: 8/16 core p460: 16/32 core
	S814 6/8 core 720 & 710 6/8 core Blades: 8/16, 16/32 core
	PureFlex/Flex: p260 7895-23A
	S814 4 core 720 & 710 4 core Blade: 4 core





## IBM i Licensing – The Basics

	Model	Structure
Large	795, 780	Per core
Medium	770, 760 , E870 , E890	Per core
	\$824 750, 740, 730	Per core
	PureFlex/Flex: p260: 8/16 core p460: 16/32 core	Per core and user
	S814 6/8 core 720 & 710 6/8 core Blades: 8/16, 16/32 core	Per core and user
Small	PureFlex/Flex: p260 7895-23A	Per core and user
	\$814 4 core 720 & 710 4 core Blade: 4 core	Per core and user





## IBM i Licensing – The Basics

	Model	Structure	Processor Group
Large	795, 780	Per core	P50
Medium	770, 760 , E870 , E890	Per core	P30
	\$824 750, 740, 730	Per core	P20
	PureFlex/Flex: p260: 8/16 core p460: 16/32 core	Per core and user	P10
	S814 6/8 core 720 & 710 6/8 core Blades: 8/16, 16/32 core	Per core and user	P10
Small	PureFlex/Flex: p260 7895-23A	Per core and user	P05
	S814 4 core 720 & 710 4 core Blade: 4 core	Per core and user	P05





#### Licensed Program Products (LPPs)

Many LPPs for IBM i are ordered separately (separate ordering Program ID)

- Purchased separately from IBM i operating system
- Licensing model varies by LPP, e.g.:
  - One License per system
  - User pricing
  - etc

Check individual Ts and Cs

Some of the separately ordered LPPs:

In this presentation and when discussing IBM i backup / recovery licensing, when referring to "LPPs," we are not referring to Passport Advantage products

5648-B45	AFP Font Collection	5761-DS2	Business Graphics Utility
5648-E77	InfoPrint Fonts	5769-FN1	AFP DBCS Fonts
5722-IP1	InfoPrint Server	5769-FNT	AFP Fonts
5733-ARE	Application Runtime Expert	5770-QU1	Query (delivered with DB2 WebQuery only)
5733-B45	AFP Font Collection for i	5798-FAX	Fax
5733-CY2	Cryptographic Device Manager for i	57xx-AF1	Advanced Function Printing Utilities
5733-CY3	Cryptographic Device Manager for i	57xx-BR1	Backup Recovery Media Services
5733-FXD	Integrated Domino Fax	57xx-DE1	DB2 Extenders
5733-ID1	InfoPrint Designer	57xx-DFH	CICS
5733-OAR	Rational Open Access, RPG Edition (now withdrawn	57xx-HAS	PowerHA for i
	effective May 2012)	57xx-JS1	Job Scheduler
5733-QU2/QU3/QU4	DB2 Web Query for i (now withdrawn)	57xx-MG1	Managed System Services
5733-	DB2 Web Query for i (new as of May 2012)	57xx-PT1	Performance Tools
WQX/WQE/WQS		57xx-RDW	Rational Developer for i
5733-XT2	XML Toolkit	57xx-SM1	System Manager
5761-AMT	Rational Application Management Toolset	57xx-SOA	Rational Developer for i for SOA Construction
5761-AP1	Advanced DBCS Printer Support (6.1 and 7.1)	57xx-SOC	Rational Developer for i for SOA Construction
5761-CM1	Communications Utilities	57xx-ST1	DB2 Query Manager and SQL Dev Kit for i
5761-DB1	System/38 Utilities	57xx-WDS	Rational Developer Studio
5761-DP4	DB2 DataPropagator	57xx-XW1	IBM i Access Family





#### Licensed Program Products (LPPs), continued

#### "Bonus Programs":

- Delivered automatically and licensed with IBM i OS, not ordered separately
- Installed individually

#### IBM i 7.2 Bonus Programs:

- IBM HTTP Server for i
- IBM Developer Kit for Java
- IBM Network Authentication Enablement for i
- IBM Portable Utilities for i
- IBM TCP/IP Connectivity Utilities for i
- IBM Transform Services for i
- IBM Universal Manageability Enablement for i
- IBM i Access for Windows (some components require IBM i Access Family 57xx-XW1)
- Zend Server Community Edition for i





#### IBM i Maintenance - SWMA

- In early 2000s Group SWMA was introduced
  - Single charge maintenance contract including many IBM i products
  - Integrated support/subscription
- Current IBM i Group SWMA covers operating system and approximately 45 selected components/LPPs
  - Combination of chargeable/non-chargeable components, including
    - Rational Development Studio (SWG)
    - Backup Recovery Media Services (STG)
    - IBM i Access (STG)
- Some IBM i products have their own SWMA contracts, i.e. not covered by Group SWMA
  - DB2 Web Query (STG)
  - PowerHA (STG)
- Other Software (SWG products and Power Software) products have their own SWMA/maintenance contracts
  - Rational Developer for i (SWG)
  - PowerVM, PowerVP (STG)





## Components of IBM i Group SWMA

5770-SS1	IBM i V7R1	5733-SO1(WE2)	Express Runtime Web Environments
	Max Users (per system, not per core)	5798-FAX	Facsimile Support
	Enterprise Entitlement	5770-DG1(SS1)	HTTP Server
5770-XW1	Access Family	5733-ID1	InfoPrint Designer
. ,	Access Family - Access for Web	5648-E77	InfoPrint Fonts
5761-XL1(WEB)		5722-IP1	InfoPrint Server
\ /	Access for Windows	5733-FXD	Integrated Domino Facsimile
5761-AP1	Advanced DBCS Printer Support	5770-JS1	Job Scheduler
5770-AF1	Advanced Function Printing	5770-MG1	Managed System Services
5769-FN1	AFP DBCS Fonts	5770-NAE	Network Authentication Enablement
5648-B45	AFP Font Collection	5733-OMF	OmniFind Text Search Server for DB2
5733-B45	AFP Font Collection for IBM i	5770-PT1	Performance Tools
5769-FNT 5733-ARE	Application Duntima Expert	5733-SC1(SS1)	Portable Utilities
5770-BR1	Application Runtime Expert  Backup Media Recovery Services	5770-QU1	Query
3770-011		5761-AMT	Rational Application Management Toolset
	Advanced Feature	5722-IA1(SS1)	Software Integration Assistant
5761-DS2	Enterprise Feature Business Graphics Utility	5770-SM1	System Manager
	Business Solutions	5761-DB1	System/38 Utilities
5770-DFH	CICS	5770-TC1(SS1)	TCP/IP Utilities
5761-CM1	Communications Utilities	5770-TS1	Transform Services
5733-CY3	Cryptographic Device Manager	5770-UME(SS1)	Universal Manageability Enablement
5761-DP4	DB2 DataPropagator	5722-WE2	Web Enablement
5770-ST1	DB2 Query Manager & SQL	5733-W85	WebSphere App Server - Express 8.5
	Development Kit	5770-WDS	WebSphere Development Studio
5770-DE1	DB2 UDB Extenders	5733-XT2	XML Toolbox
5761-JV1(SS1)	Developer Kit for Java	J133-X12	AIVIL TOUIDUX





## Non-Group SWMA Products

Product ID	Title
5733-QU2	DB2 Web Query
5733-QU3	IBM DB2 Web Query - Report Broker
5733-QU4	IBM DB2 Web Query - Software Development Kit
5761-HAS	High Availability Solutions Manager
5770-HAS	PowerHA for i
5733-RDI	Rational Developer Tools for i5/OS
5733-SOA	Rational Developer for System i for SOA Construction
5733-RDP	Rational Developer for Power Systems Software: RPG and COBOL Development Tools for i
5733-WQS	IBM DB2 Web Query for i Standard
5733-WQE	IBM DB2 Web Query for i Express

#### For the complete list, refer to:

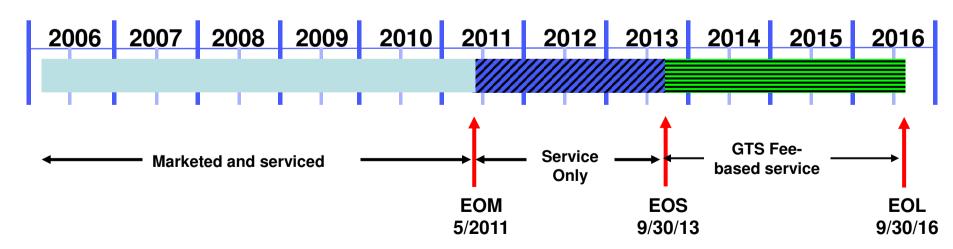
http://www-03.ibm.com/systems/power/software/i/subscription/list.html#maintenancel
Select IBM i products with their own Software Maintenance





#### Some details about SWMA

- SWMA is version agnostic
  - Purchase SWMA to be eligible for upgrades
  - For releases out of support: Service Extension for limited technical support
- Currently supported releases
  - IBM i 6.1, IBM i 7.1, IBM i 7.2
  - To obtain IBM i V5R4 Service Extension
    - Must have current SWMA contract
    - Purchase Service Extension to allow SWMA support on V5R4
- \* IBM i 5.4 LifeCycle:







## Agenda

Basic Concepts



Basic Rules

• CBU and DR machines additional charts on page 39 & 40 added for DBM provided by Service Provider





## **Basic Licensing Rules**

- ully
- IBM i is only licensed for the machine serial number on which it was originally sold
  - These terms are modified with CBU rules and by IBM i Entitlement Transfer offering
- PowerVM VIOS is only licensed for the machine serial number on which it was originally sold
- Generally, other than IBM i OS and PowerVM, other IBM i Licensed Program Products can be transferred between systems belonging to the same Enterprise since V5R3
  - V5R2 and earlier, the whole SW stack could be sold with the machine to another customer
- Other Software for all other Power Software, SWG products and ISV Software, refer to software license terms

IBM Product License Agreements are published on the Software License Agreement web site: www.ibm.com/software/sla





#### Basic Licensing Rules

- The My Entitled Systems Support (ESS) website is an important resource for software information
  - Software Entitlements electronic Proof of Entitlement (ePoE)
     (V5R2 and prior had paper SW Entitlements which must be verified)
  - Key Management
  - SW Maintenance Records
  - Updates, some upgrades excluding 5761-HAS
  - Transfer of entitlements excluding IBM i per processor and user entitlements & few others
  - Software Downloads
  - IBM i Try & Buy, National Language Version (NLV) Downloads
  - For countries supported for downloads see
     <a href="http://www-947.ibm.com/systems/support/software/delivery/en\_US/supportedcountries.html">http://www-947.ibm.com/systems/support/software/delivery/en\_US/supportedcountries.html</a>
  - The Key Center can be contacted at <u>WWSWKEYS@dk.ibm.com</u>
- Customers can use it themselves or register a BP to do it for them
- More of the ESS website will be covered in Session 44





#### **User-based Licensing**

Tier	Model	Structure
	PureFlex/Flex: Flex System p260 Compute Node 8/16 - core Flex System p460 Compute Node 16/32 – core	Per core and user
Small	\$814 6/8 core 720 6/8-core 710 6/8-core P\$701/703 8/16 – core P\$702/704 16/32 – core	Per core and user
	S814 4 core 720 4-core 710 4-core PS700 4-core Flex System p260 Compute Node 4- core	Per core and user

- Two components to pricing for small (P05/P10) machines
  - Per processor core
  - Per User
- Users can be purchased in blocks of 5 or 10
- Unlimited User Entitlement option
- The charge is for concurrent users
- A user is a person not a userid, a profile, a program, or anything else!
  - A person who accesses IBM i and exchanges credentials directly with IBM i or indirectly with an application running on IBM i





#### User-based Licensing: Special Scenarios

- Separate charge offered for External Users
  - Provides access to individuals who are NOT employees or similar personnel of your enterprise or individuals to whom you provide hosted services
- Special price for Unlimited Collaboration Users
  - Provides entitlement for an unlimited number of users who access IBM i solely for the use of collaboration products and for no other purpose. Licenses for these products are sold separately:
    - IBM Lotus Domino
    - IBM Lotus Sametime
    - · IBM Lotus Quickr (The Domino Version)
    - IBM Lotus Quickplace
    - IBM WebSphere Portal or
    - IBM-approved IBM i appliance solutions



- DB2 Web Query and Rational Developer for i are licensed to named users
- Refer to <a href="http://www.ibm.com/systems/power/software/i/licensinginformation/">http://www.ibm.com/systems/power/software/i/licensinginformation/</a>





#### Basic Licensing Rules – IBM i per processor and user entitlements

IBM i (5761-SS1 / 5770-SS1) entitlements (ePoE) :

#5050 Base entitlementkey protected

#5051 per Processorkey protected

+ #5052 user- key protected

#5053 Application Server per Processor
 key protected

Operating System (OS) priced features also have ePoEs

- e.g. Media & Storage Extensions , HA Switchable Resources, etc
- please note that not all OS priced features have keys
- an ePoE will exist if the feature has been ordered
- the feature will only be available for download from ESS website if it has been ordered
- Non keyed OS priced features are NOT available for Try & Buy





## Basic Licensing Rules – IBM i LPPs entitlements

- IBM i Licensed Program Products (LPPs):
  - All IBM i LPPs have an entitlement
  - Some IBM i LPPs are keyed, examples



5770-AF1	Advanced Function Printing
5761-AP1	Advanced DBCS Printer
	Support
5770-BR1	Backup Media Recovery
	Services
	Network Feature (opt 1)
	Advanced Feature (opt 2)
5761-CM1	Communications Utilities
5761-DP4	DB2 DataPropagator
5770-HAS	PowerHA for i
5733-ID1	InfoPrint Designer
5722-IP1	InfoPrint Server
5770-JS1	Job Scheduler
5770-PT1	Performance Tools
5770-QU1	Query
5770-ST1	DB2 Query Manager and SQL
	Development Kit
5770-WDS	WebSphere Development
	Studio
5733-WQE	DB2 Web Query - Express
5733-WQS	DB2 Web Query - Standard
5770-XW1	IBM i Access Family

Some LPPs are Charged but Not keyed, examples

Not all products are shown

5770-MG1	Managed System Services	
5761-AMT	Rational Application	
	Management Toolset	
5770-SM1	System Manager	
5761-DB1	System/38 Utilities	





#### Acquiring Keys for Earlier Version /Releases

- Steps to acquire keys for earlier versions / releases:
  - Previously:
    - Request from Key Center
    - LPAR feature required
    - SWMA required



- SWMA required
- Keys automatically created for entitled release plus two release prior to entitled version
  - e.g. client has V7.1 entitlement, automatically acquire keys for 7.1, 6.1, and 5.4
  - Clients can request keys for earlier versions subject to requirements: SWMA and entitlements in place







#### Agenda

- Basic Concepts
- Basic Rules



CBU and DR machines additional charts on page 39 & 40 added for DBM provided by Service Provider



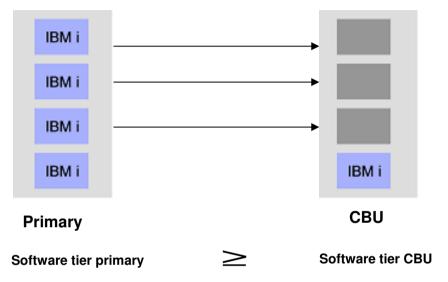


Capacity Backup Edition (CBU for i)





#### Power Systems Capacity Backup Edition (CBU for i) - Overview





- The CBU offering is used in high availability and disaster recovery deployments
- Offering enables customers to move workload between boxes without fully redundant OS entitlements
- Minimum one processor entitlement of IBM i for all models and user entitlements for S814 / POWER7 720 and below
  - > Processor entitlements required for productive workload on CBU, e.g. replication services
- Two-year temporary keys eliminate redundancy for eligible LPPs
- CBU designation available only upon purchase of a new box and must be registered to a qualified primary.
- If a CBU is no longer affiliated with the original registering customer, it is not recognized as a CBU.
- Registration process: client agrees to terms and conditions, CBU registration is validated, shipment is approved
- CBU agreement requires that both the primary and CBU are owned by the same enterprise.





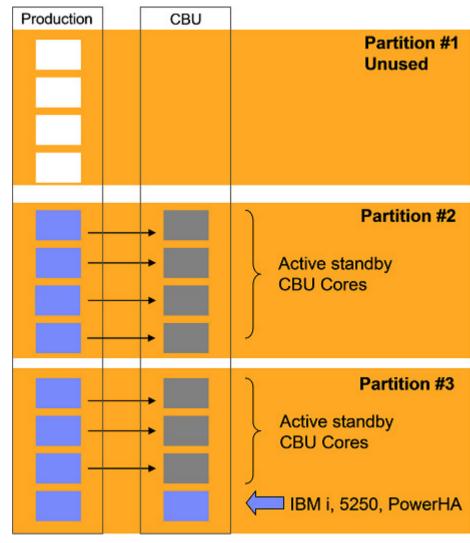
#### Capacity Back Up (CBU) Licensing Example - Simple two-system topology

#### **Planning**

- CBU allows PowerHA licenses entitlement fail-over from the registered production server
  - Minimum 1 entitlement required on the CBU box\*
  - CBU server allows the temporary transfer of entitlements from primary server for non concurrent usage on the CBU server
  - Round-up when using partial processors
  - 3.5 processors = 4 entitlements
  - One customer

#### **Example**

- No HA/DR required for Partition 1
  - No PowerHA licenses
- HA required for Partition 2 and 3
  - All processors in the production server partitions 2 and 3 are licensed for PowerHA
  - One key, 8 entitlements
  - The license key will be a permanent key installed on partition 2 and 3
- A single processor is licensed on the CBU server
  - One key, one entitlement
  - The non-OS LPPs will be temporary keys for 8 cores good for two years installed on partitions 2 and 3
  - \* if the HA/DR solution requires more than one core on CBU to run replication services, those extra cores must also be licensed.



\* PowerHA is used as an example and is not required for CBU





#### CBU for IBM i Temporary Transfer Procedure

- A software key tells each system's license manager how many IBM i processor license entitlements are entitled on each system. If the client ever runs or assigns more IBM i work than the system has entitlements, messages are issued to the operator indicating the IBM is out of license compliance. By the terms of the IBM licensing agreement, the client must then bring the IBM into compliance by either a) reducing IBM i workload or b) adding IBM i processor license entitlements.
- Accepting the terms of the CBU license agreement, which allows the temporary transfer of IBM i, documents that IBM and the client understand when entitlements can be transferred from the primary to the CBU system.
- IMPORTANT: When IBM i entitlements are temporarily transferred to the CBU system, the software keys are not altered on <u>either</u> machine. Thus the CBU system will issue the out-of-compliance messages when the workload fails over from the primary. The CBU license terms give permission to the client under this situation to ignore these messages. The client agrees to monitor the IBM i usage on both the primary and CBU systems to ensure the IBM i usage on the pair of machines does not exceed the total number of IBM i processor license entitlements.
- In addition to IBM i processor license entitlement, P05 and P10 processor group level systems have IBM i user entitlements. User entitlements are transferable from the primary to the CBU. If the primary system is an IBM i processor based system (P20 processor group or higher), and the CBU is a processor and user based system, you must purchase any required user entitlements on your CBU.





#### **CBU Offering**

- Primary and CBU must always be in the same enterprise
- Solution Edition cannot be used as a CBU
- Refer to <a href="http://www.ibm.com/systems/power/hardware/cbu/">http://www.ibm.com/systems/power/hardware/cbu/</a> for the latest info and Q&A:





**Designated Backup Machine** 





#### Designated backup machine (DBM)

- The DBM is distinct and separate from the CBU offering
- Can be a new or used machine, is paired with at least one primary machine
- The primary system's CPW rating must be greater than or equal to the CPW rating of the DBM
- All processor cores used for backup recovery services, including those used to create and or manage the backup recovery environment, must be licensed
  - i.e., IBM i operating system entitlements are not temporarily transferable as in the case of the CBU offering. IBM i entitlements are required on the DBM for all IBM i workload which can run on the DBM





#### Designated backup machine (DBM)

- Two-year temporary keys for the non-OS LPPs for the DBM are available by completing the form TEMPORARY KEY REQUEST FOR BACKUP MACHINES
  - Upon approval, temporary keys are generated for the DBM for all of the primary system's entitled LPPs
  - Any LPPs for which temporary keys are acquired...
    - May not be used concurrently on primary and DBM
    - Can only be used for backup recovery purposes and not for production
- A client may use one DBM to backup multiple primary machines by creating a partition on the DBM which meets CPW requirements
  - When submitting the Temporary Key Request form, the client is required to provide verification that the CPW rating of the DBM partition does not exceed the CPW rating of the client primary (i.e. from the HMC, show the processors allocated on the client's partition)
- Is SWMA required on the DBM?
  - If you need software service on the DBM, acquire SWMA on the DBM serial
  - If you upgrade the entitlements on the primary system, you will need SWMA on the DBM in order to get upgraded temporary keys for the LPPs

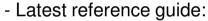




#### How to Get Temp Keys for a Disaster Recovery Backup System

You can get two-year temporary keys **for non-OS IBM i LPPs** for a DR backup system by completing the form *REQUEST FOR DESIGNATION OF A BACKUP IBM MACHINE* 

- For any software for which you've acquired temporary keys, software cannot run concurrently on primary and DR backup system
- Any productive workload on the designated backup system must be licensed
- In order to qualify as a DR backup system (NOT a CBU) and acquire temp keys, backup system must be equal to or smaller than primary system as measured by CPW:



Performance Capabilities Reference (CPW Ratings start with Section 1 page 15) www-03.ibm.com/systems/resources/systems\_power\_software\_i\_perfmgmt\_pcrm\_oct2014.pdf

 You are responsible for renewing after two years. No automatic notification is sent from the Key Centre







## Request for Designation of a Backup IBM Machine:

- Request temp keys for non-OS LPPs for CBU and Designated Backup Machine

RE	QUEST FOR DESI	GNATION OF A BA	CK UP IBM MACI	Page 1 of 3 HINE
entire form must b	e completed. For a	renewal request wher	e there has been NO	licensed products, the O product, machine seria tion on page 3 is NOT re-
Date of Request		Request Type:	New/Mach Chang	e Renewal
Requester Name_		e-Mail a	ddress	
Customer Name				
Country Installed:	Backup Machine _		_Primary Machine	<u>.                                    </u>
products can not be	used concurrently or Backup Machine ca	ly be used as a back up n both machines. For no an not be higher than the Serial Number	on-CBU machines, the Primary Machine (	ne CPW rating (perforexceptions may apply).
				(where licenses reside)
Backup Machine			-	
Backup Machine Primary Machine				





#### Request for Designation of a Backup IBM Machine

- Request temp keys for non-OS LPPs for CBU and Designated Backup Machine

IBM Sa	iles F	Repres	entative
--------	--------	--------	----------

Country	Telephone
form is considered signe	ed when IBM Rep e-mails the completed form)
Signature	
e-mail address	
Name(Print)	
have read and the custo	mer is informed of the terms and conditions on page 2.

#### Terms and Conditions

- 1. The listed IBM Backup Machine can only be used as a back up and recovery machine.
- 2. The listed licensed products can not be used concurrently on both machines with the exception of running periodic tests to determine whether the backup facility will adequately back up their system. These tests can not include any productive work, development, program testing or maintenance. They must be run solely to check out the adequacy of the back up facility to support disaster recovery procedures.
- 3. Upon termination of use of this machine as a backup machine, the customer must complete the following:
  - A. Send a note to the IBM Key Center e-mail address indicating the termination of use as a backup and the disposition of the machine (put in storage, sold, or now operating as a production machine).
  - B. All non-Base i, i5/OS, OS/400 software products must be removed from the machine.
  - C. If the Version/Release/Modification (VRM) level of i, i5/OS, OS/400 has been upgraded while the machine was used as a backup (without a software maintenance offering), the Base i, i5/OS, or OS/400 must be returned to the entitled VRM.
  - D. Contact the IBM Key Center to inactivate the software keys that were obtained for the machine. If the Entitled i, i5/OS, OS/400 VRM is lower than the installed VRM, request the lower VRM key to be re-activated and re-load the entitled VRM and key on the machine.





#### Request for Designation of a Backup IBM Machine

- Request temp keys for non-OS LPPs for CBU and Designated Backup Machine

st the Licensed Programs on the primary machine required on the backup machine (back up use only).  The requested PRODUCT/VRM/LOAD ID must be licensed or authorized on the primary machine. Note:					
		for a renewal reques		on me primary ma	reimie. Ivote.
RODUCT : 5770-PT1)	VRM (Ex V7R1M0)	LOAD ID (Ex 5050)	PRODUCT (Ex 5770-PT1)	VRM (Ex V7R1M0)	LOAD ID (Ex 5050)





#### How to Get Temp Keys for a Disaster Recovery Backup System

You can get two-year temporary keys **for non-OS IBM i LPPs** for a DR backup system by completing the form *REQUEST FOR DESIGNATION OF A BACKUP IBM MACHINE* 

- For any software for which you've acquired temporary keys, software cannot run concurrently on primary and DR backup system
- Any productive workload on the designated backup system must be licensed
- In order to qualify as a DR backup system (NOT a CBU) and acquire temp keys, backup system must be equal to or smaller than primary system as measured by CPW:
  - Latest reference guide:
    - Performance Capabilities Reference (CPW Ratings start with Section 1 page 15) www-03.ibm.com/systems/resources/systems\_power\_software\_i\_perfmgmt\_pcrm\_oct2014.pdf
- You are responsible for renewing after two years. No automatic notification is sent from the Key Centre



NOTE! Changes coming soon to temp key request for backup process and form!

Watch <a href="www.ibm.com/systems/support/planning/ibmi\_license.html">www.ibm.com/systems/support/planning/ibmi\_license.html</a> "IBM i Licensing topics"





#### Designated backup machine (DBM) provided by Service Provider

- Please note that for Managed Service Providers (MSP) who provide a DBM service:
  - MSP must purchase the IBM i OS entitlements (processors / users)
  - DBM service provided to a client with multiple systems:

MSP can request two-year temp keys for client's non-OS LPPs if the CPW rating of the DR provider partition < = CPW rating of the corresponding client's production partition.

- A backup request form is required for each primary system
- The MSP is required to provide verification to the Compliance & Entitlement Support team that the CPW rating of the partition for the client does not exceed the CPW rating of the client machine (i.e. show from the HMC the processors allocated on the client's partition).
- DBM service provided to multiple clients

MSP can request two-year temp keys for each client's non-OS LPPs if the CPW rating of the DR provider partition < = CPW rating of the corresponding client's production partition.

- A backup request form is required for each client system
- The MSP is required to provide verification to the Compliance & Entitlement Support team that the CPW rating of the partition for the client does not exceed the CPW rating of the client machine (i.e. show from the HMC the processors allocated on the client's partition).





#### Temporary Key Request Form for DBM

If you have multiple primary machines being backed up to a single DBM, submit separate Temporary Key Request forms for each primary

#### Examples:

- A client has three primary machines and one DBM. The client should submit three Temporary Key Request forms, one for each primary
- A Service Provider has one DBM backing up four client primary machines. The SP should submit four Temporary Key Request forms, one for each client primary



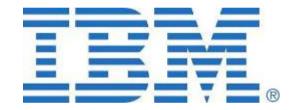


## Agenda

- Basic Concepts
- Basic Rules
- CBU and DR machines
- Session 44
- Temp Keys & Transfers & Days, oh my!
- IBM i per processor / user entitlement transfers
- Introduction to the My Entitled Systems Support website aka ESS website











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# Feb 11<sup>th</sup> The "Key" to IBM i Licensing and more Part2 With Andy Fellows





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