The New IBM System i 525 Capacity BackUp Edition

Breakthrough Savings for SMB Business Resiliency Deployment

S Finnes 10/16/2007

i want to be ready for whatever tomorrow brings.

i want control.

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The New System i 525 Capacity BackUp Edition Highlights

Innovative

✓ Temporary transfer i5/OS Entitlements from Primary to CBU

✓ Temporary transfer i5/OS User Entitlements from Primary to CBU

Simple

✓ 525 CBU for any (Standard or Enterprise) 520 Primary System
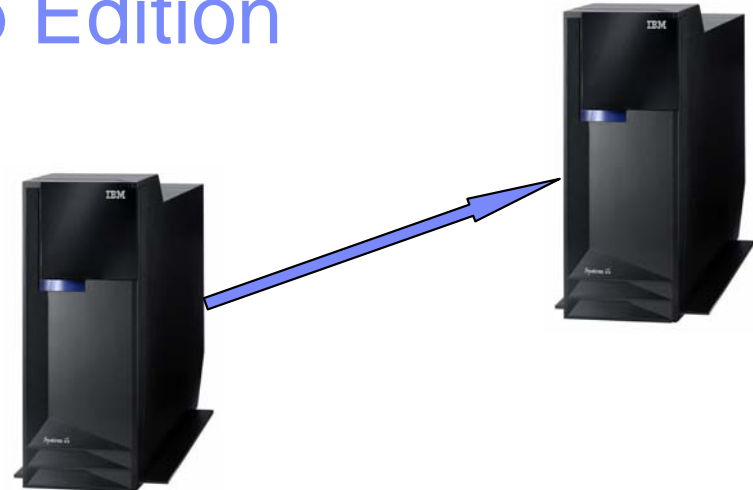
✓ 525 CBU for any 525 Primary System

Cost effective

✓ Cost effective purchase price

✓ Reduced-price user based entitlements for 520 as Primary

www.ibm.com/systems/i/hardware/cbu

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System i 525 Capacity BackUp Edition

- **Offering intended for:**
  - Cost effective disaster recovery or HA for multiple environments including i5/OS, AIX and Linux
  - Dynamic HA clustering environments

- **Offering enables:**
  - Base 30 user 525 fc 6910
  - 520 Primary System
    - At initial purchase of 525 CBU optional reduced price user entitlement features may be purchased
    - At initial purchase optional reduced price unlimited entitlements feature may be purchased
    - After Initial Purchase user entitlements may be purchased at regular price
  - 525 Primary System
    - Temporary transfer of optional user entitlements from model 525 primary to 525 CBU
    - Purchase of user entitlements at regular price
  - 520 or 525 Primary System
    - Temporary transfer of optional per processor i5/OS license entitlements from model 525 1/2 way primary or 520 1/2 or 2 way primary system

Prerequisites
  - Primary server must be a model 525 or a model 520
  - May purchase additional user entitlements (but at reduced price if done at time of purchase of 525 CBU) for 520 as primary
  - 525 may purchase user entitlements at regular price
  - Both systems must be in the same enterprise & same country
  - Registration of primary system and CBU Edition is required prior to CBU order (new box or MES upgrade) being manufactured: go to
    www.ibm.com/systems/i/hardware/cbu

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Who Should BUY A 525 CBU

1. **Any customer doing tape back up as their primary DR solution approach**
    –   The 525 CBU is the economic way to move to a more robust HA or DR solution approach

2. **Any customer with either a 520 Enterprise Edition or Standard Edition or a 525 Primary**
    –   A very low cost way to get started on DR or HA

3. **Customers using 3rd party disaster recovery services**
    –   Provides a compelling cost case for in-sourcing HA/DR

4. **Customers considering HA technology options**
    –   Global Mirroring, Logical Replication, XSM, IASPs, Metro Mirroring

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Positioning the System i 520 & 525 CBU Editions

	i520 CBU Edition	i525 CBU Edition
Disaster Recovery	Yes	Yes
High Availability	Yes	Yes
Solutions/options which allow edition to be ordered:		
HA ISV Solutions	Yes	Yes
Independent Auxiliary Storage Pools	Yes	Yes
Cross Site Mirroring (XSM)	Yes	Yes
IBM DS8000	Yes	Yes
Temporary transfer of optional processor i5/OS license entitlements	Yes	Yes
Temporary transfer of optional i5/OS user entitlements from 525	NA	Yes
Temporary Enterprise Enablements (5250) Transfers	Yes	525 is User Based
AIX 5L, Linux License Transfers or Deployments	Yes	Yes
Standard Edition CBU (zero 5250)	Yes	525 is User Based
Upgrade into CBU Edition	From 810	Only 520 CBU
Registration of primary system, CBU & # of users to qualify	Yes	Yes
Primary system must have larger or equal CPW rating	Yes	No

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9406 model 525 CBU Prerequisites

In order to order the following 525 CBU	One of the following mst be either installed or on order as the primary machine
#6910 (30 user)	- **525 Express #7790(30), #7791(150), #7792(unlimited)** - **All 520 Enterprise Edition or Standard Edition models** - **810 Not eligible, upgrade primary to a 525, then add CBU**

Temporary transfer of i5/OS user license entitlement and i5/OS processor license entitlements

- All 525 CBUs must have i5/OS user entitlements
- Customers can add optional entitlements to their CBU editions at any time
- 520 customers may purchase blocks of 10 reduced price features of i5/OS users licenses at the time of purchase of the 525 CBU (regular price thereafter)
- 520 customers may buy the unlimited reduced price feature of i5/OS user licenses at the time of purchase of the 525 CBU (regular price thereafter)
- Optional i5/OS user license entitlements may be temporarily transferred from the registered primary 525 system to the registered 525 CBU at no charge - at any time - for any reason
- i5/OS user license entitlements are required for all users of the CBU
  - Customers may source user entitlements in one of three ways
  1. The base 30 user entitlements
  2. Buy optional user entitlements
  3. Transfer from a 525 primary system

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9406 model 525 CBU Edition Configuration

30

#6910

CBU Configuration

1/2-way 525 3800/7100 CPW
Imbedded 2 LAN ports and
    disk/tape/DVD controller
NC I/O Processor (IOP)
NC 1 WAN IOA
1 NC processor activation

NC P10 SWMA   1 yr

NC i5/OS V5R4
    One processor license
NC i5/OS 30 Users
    Three NC features
NC iSeries Access (unlimited)

150

#xxxx

CBU Config-2

150 or unlimited packages not needed
Can temporarily transfer i5/OS user entitlements from primary 525
Can get lower-price user entitlements on initial purchase if have 520 as primary system
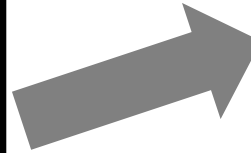
Max

#xxxx

CBU Config-3

Notes:
- NC = no charge feature … available only with initial shipment.
- NC Features can be removed and other features substituted (at full charge)
- Configurable – build to order. Features can be added to these configs
- NC Tape drive, memory, disk drives are not included in the 525 CBU configuration

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520 CBU to 525 CBU Upgrade Details

From 520 1.9GHz CBU			
Server	Proc	Edition	Description
#0906	#8327	#7710	CBU Ed 1200
#0906	#8327	#7711	CBU Ed 2800
#0906	#8327	#7712	CBU Ed Std 3800

To 525 1/2-way CBU			
Server	Processor	Edition	Description
#0984	#8330	#6910	30 user

- **1.9GHz 520 1-way to 525 is a set of parts replacement, not a box swap.**

- **Since there is no performance gain, there are no 1/2-way 520 CBU upgrades to a 525 1/2-way CBU**

- **No 810 upgrades into a 525 CBU Edition**

- **The no-charge features associated with a 525 CBU edition (IOP or WAN IOA) are NOT shipped with the upgrade. These components are brought over from the 520.**

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HA/DR ISV Enhanced CBU Companion Offers

HA/DR ISV	Companion Offer	Website URL
IBM DataMirror	DataMirror iCluster for CBU	www.datamirror.com/cbu
Maximum Availability	NoMax CBU	www.maxava.com/cbu
Trader's	Quick EDD CBU Edition	www.quick-edd.com/uk/promos_ibm.htm
Vision Solutions	iTera HA, MIMIX HA, ORION HA	www.visionsolutions.com/cbuoffer

To activate hyperlinks, view in Screen Show mode

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Pricing Comparisons

CBU Model	525 CBU Edition	Reduced Price* i5/OS User Licenses	CBU Enterprise Edition Price	CBU Standard Edition Price	*HA Edition Price*
525 1/2W	$29,000 30 users	Blocks of 10: $1K Unlimited : $30K	NA	NA	NA
520 1/2w			$85,000	$35,000	$109,999
520 1 (1200)			$33,000		40,500
520 1 (2800)			$64,000		82,900
520 1 (3800)				$29,000	

Reduced Price features are available only upon initial purchase of 525 CBU

Prices are are for illustration only and are subject to change.

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Registering an Order for a CBU Edition

- The 525 CBU Edition has new, more flexible terms and conditions for transferring optional i5/OS license and/or user entitlements between systems. Registration is required prior to fulfillment
  - www.ibm.com/systems/i/hardware/cbu

- The order will only be scheduled for manufacture after the system is registered and the signed license agreement is transmitted to IBM

- The 525 CBU will be registered to only one primary system within the same enterprise and within the same country.

System i Capacity BackUp Registration

Registration form

The System i Capacity BackUp Editions are designed to enable a new i5 system to act as a backup system in a high function, high availability or disaster recovery environment. To be eligible for this offering, you must provide the following information about your installation and accept the terms and conditions of the offering requested in the registration process below, prior to the shipment of your System i CBU Edition.

Client information

* Name: [_____]

* E-mail: [_____]

* Country: [Select a country ▼]

* Phone number: (including country code)
[_____]

* Fax number: (including country code)
[_____]

Company information

* Company Name:
[_____]

* IBM Customer Number of Primary System i5:
[_____]

Hardware information

* Select Your Primary system:
[Select one]

* Primary system Serial #: (or Plant Order # if on order)
[_____]

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Frequently Asked Questions

1. *What is an i5/OS user?*
   – *An i5/OS User is a person who accesses i5/OS and exchanges credentials directly with i5/OS or with an application on i5/OS. Examples of credentials are a user-id and password, Kerberos authentication, LDAP Directory, or fingerprint identification.*

2. *What is an i5/OS User Entitlement?*
   – *An i5/OS User Entitlement gives a user the right to access i5/OS.*

3. *Who needs an i5/OS User Entitlement?*
   – *Every i5/OS User needs an i5/OS User Entitlement.*

4. *What about i5/OS Users that are external to an enterprise?*
   – *If you would like to allow users external to your enterprise, such as your business partners or customers, to access i5/OS on your system, you have two licensing options:*
   – *Acquire an i5/OS User Entitlement for each of user external to the enterprise*
   – *Acquire an i5/OS External Access option for your system*

5. *What is meant by users in an enterprise?*
   – *Users in an enterprise are employees or other similar personnel or individuals to whom you provide hosted services.*

6. *What is the definition of enterprise?*
   – *An enterprise is any legal entity (such as a corporation) and the subsidiaries it owns by more than 50 percent.*

7. *Who are i5/OS Users external to an enterprise?*
   – *i5/OS Users that are customers, suppliers, and partners, who are not employees of your enterprise, are external to an enterprise.*

8. *Are i5/OS User Entitlements based on the number of concurrent users?*
   – *No, each i5/OS User requires an i5/OS User Entitlement regardless if they are logged on or actively accessing the system.*

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Frequently Asked Questions

9. *Is someone that accesses a 5250 application an i5/OS User?*
   - *Yes, a person that exchanges credentials with i5/OS or an application on i5/OS is an i5/OS User regardless of connection type or application accessed.*

10. *Does an i5/OS User that works remotely need an i5/OS User Entitlement?*
   - *Yes, every i5/OS User in your enterprise needs an i5/OS User Entitlement regardless of location (e.g., central office, remote office, or home).*

11. *Does an employee that accesses i5/OS once a month need a user entitlement?*
   - *Yes, every i5/OS User in your enterprise needs an i5/OS User Entitlement regardless of how often they exchange credentials with i5/OS or an application on i5/OS.*

12. *Does an employee that uses a client/server application need a user entitlement?*
   - *If the employee exchanges credentials with i5/OS or an i5/OS application, then yes they need an i5/OS User Entitlement.*

13. *Does a user that never exchanges credentials need an i5/OS User Entitlement?*
   - *No, a user that does not exchange credentials with i5/OS or an application on i5/OS is not an i5/OS User and therefore does not need an i5/OS User Entitlement. For example, an unidentified person that just browses your web site does not need an i5/OS User Entitlement.*

14. *Are customers, suppliers, or partners allowed to access i5/OS applications?*
   - *Yes, an i5/OS User can be a person external to an enterprise.*

15. *Do i5/OS Users external to an enterprise need i5/OS User Entitlements?*
   - *Yes, every i5/OS User external to your enterprise needs an entitlement, regardless of their location, connection type, application accessed, user interface, or how often they access i5/OS.*

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Frequently Asked Questions

16. *Does the 525 CBU offer "free" usage days for role swap testing ?*
    – *No, the 525 CBU is already highly flexible and economic.*

17. *What does temporary mean when used in the context of transferring optional i5/OS user entitlements or optional i5/OS license entitlements ?*
    – *Temporary means that the transferred entitlements "belong" to the primary system. If the primary system goes away, all optional transferred i5/OS user entitlements or i5/OS license entitlements remain with the primary system.*

18. *Can I transfer my base i5/OS user entitlements ?*
    – *No, the base i5/OS entitlements in the 525 are not transferable*

19. *Why are reduced price i5/OS user entitlements offered as part of the initial purchase of a 525 CBU if the primary system is a 520 ?*
    – *The 520 does not have i5/OS user entitlements and the 525 REQUIRES them. You need to acquire enough i5/OS user entitlements to support your role swap operations between your 520 primary and your 525 CBU.*

20. *What happens to my reduced price i5/OS entitlements if I upgrade my 520 to a 525 or if my 520 goes away ?*
    – *The reduced price i5/OS user entitlements are valid as long as your 525 CBU is paired with your registered 520 system or if that 520 system has been upgraded to a 525. The reduced price user entitlements you initially purchased are still valid and may be used as long as the two systems initially registered remain paired together.*

21. *Is my primary system required have more CPWs than my 525 CBU ?*
    – *With the introduction of i5/OS user entitlements this is not a requirement. You must however purchase as many i5/OS user entitlements as you need to support your 520 primary system in role swap operation.*

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Frequently Asked Questions

22. *What happens if if the registration is not completed ?*
- *The order will not be fulfilled.*

23. *Can I use the second processor on my 525 CBU for running an AIX application ?*
- *If you have sufficient capacity for your i5/OS operations on a single processor, you may use the second processor for any purpose as long as you have purchased the processor activation The second processor may be used for failover (with transferred license entitlements from the primary system) OR i5/OS, Linux or AIX 5L may be purchased to run workload concurrently.*

24. *How many primary System i systems can I backup with my 525 CBU ?*
- *Only one System i which is designated as the primary system (and it must be owned by the customer) may be paired to a CBU for the purpose of role swap operations*

25. *Can my 520 primary system be either a Standard or an Enterprise Edition ?*
- *Yes your 520 primary system can be either a Standard Edition or an Enterprise Edition.*

26. *What type of HA or DR solution can I use with my 525 CBU ?*
- *You can use any approach you choose. Cross Site Mirroring (XSM), IASPs, DS6000, and Logical Replication are the most commonly deployed technologies.*

27. **Must every Licensed Program product that is installed on the primary system be purchased additionally on the CBU system ?**
- *IBM IPLA license agreements allow you to transfer Program Products to a backup server as long as the primary server is down or not in production. You must license any program product that is used on the CBU and the primary system concurrently.*

28. **Can a business recovery service provider use the System i Capacity BackUp offering to support multiple customers**
- *No. The CBU is designed and priced to support one primary system within the same enterprise*

29. **Can the CBU ever function as a stand alone production system ?**
- *No. The CBU is registered with a specific primary server and must remain so to be in compliance..*

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i5/OS Temporary Transferal Mechanics

- Every System i machine comes with an i5/OS license. The customer also has a specific number of "i5/OS processor license entitlements" (commonly called i5/OS licenses or i5/OS processor licenses).

- A software key tells each system's license manager how many i5/OS processor license entitlements each system has.   If the customer ever runs/assigns more i5/OS work than the system has entitlements; then messages are periodically issued to the operator indicating the system is out of license compliance. By the terms of the IBM licensing agreement, the customer must then bring the system into compliance by either a) reducing i5/OS workload or b) adding i5/OS processor license entitlements.

- Signing the additional license agreement for CBU temporary transfers documents that IBM and the customer understand when entitlements can be transferred from the primary to the CBU system.   (Signature is either a real signature or a "click to accept".)

- IMPORTANT … when entitlements are temporarily transferred to the CBU system, the software key information on <u>neither</u> machine is altered. Thus the CBU system will issue the out-of-compliance message indicating i5/OS is out of compliance. The customer agrees to monitor the i5/OS usage on both the primary and CBU systems to ensure the i5/OS usage on the pair of machines does not exceed the total number of i5/OS processor license entitlements.

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