IBM @server zSeries
Introduction
October 2003

On/Off Capacity on Demand and
IBM @server zSeries 990
Frequently Asked Questions

Worldwide

OOCoD for z990 FAQ PACKAGE
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**z990 On/Off Capacity on Demand for IFL Engines**

**Question:**
When will customers be able to order and install temporary IFL engines on their IBM @server® zSeries® 990 (z990) servers?

**Answer:**
On October 7, 2003, end users may order and install temporary IFLs (Integrated Facilities for Linux) on their z990 machines.

**Question:**
What is the price of On/Off Capacity on Demand (On/Off CoD) for IFL Engines for z990?

**Answer:**
The actual pricing will be similar to how On/Off CoD is priced for the standard processing units on z990. See the announcement for your country.

**Question:**
Can I order On/Off CoD for IFL Engines for z990 now?

**Answer:**
No. Not until On/Off CoD IFL engines are available.

**Question:**
Will the IBM @server zSeries 800 (z800) or zSeries 900 (z900) servers be able to take advantage of On/Off CoD?

**Answer:**
No. The zSeries On/Off CoD technology requires that the server be a z990.

**Question:**
How many temporary IFLs may a customer order with On/Off CoD?

**Answer:**
A customer may order IFLs up to the number of permanently purchased IFLs on a given machine.
z990 On/Off CoD

Question:
How do I order the IBM @server On/Off Capacity on Demand for the z990?

Answer:
On/Off CoD enablement (FC 9896) can be ordered with a new-built IBM @server zSeries 990 (z990) machine, or with any MES, either directly from IBM or through an authorized IBM Business Partner.

Question:
What are the requirements for ordering this On/Off CoD Offering?

Answer:
On/Off CoD requires a) Customer Initiated Upgrade (CIU) enablement on the same machine (FC 9898), b) executed On/Off CoD / CIU end user agreements, c) an active RSF connection between the z990 machine and IBM.

For customers without an RSF connection between the z990 machine and IBM, the On/Off CoD Offering may be ordered with an RPQ request.

Question:
What kinds of workload is On/Off CoD intended for?

Answer:
On/Off Cod is intended for any workload that runs on the permanent z990 CPs or IFLs.

Question:
Who would be interested in the On/Off Capacity on Demand offering?

Answer:
Any customers who would like to pay for the temporary capacity upgrades they need, when they need it, on a daily basis, for as long as they need it, would be interested in On/Off Capacity on Demand.

On/Off CoD is for predictable and unpredictable capacity growth. With the announcement of On/Off Capacity on Demand, customers can choose to turn on temporary processor resources to help meet e-business capacity growth, whether predicted or not.

Some e-business may encounter predictable peak workload demands on a temporary basis. By choosing to purchase the On/Off Capacity on Demand right-to-use feature, customers have the ability to turn temporary processing resources to handle spikes in workload demand, and turn it off when normal workload levels resume.

For unpredictable capacity growth, customers can order additional processing capacity quickly and nondisruptively by turning on extra resources when they need them, and turning them off when they don’t. Customers may want to pilot new workloads with temporary extra capacity and "test the waters" for revised capacity needs. Customers can also deploy new applications with temporary extra capacity and evaluate resulting capacity needs.
On/Off CoD allows customers the ability to order a temporary CP or IFL upgrade and use it when they need it, for as long as they need it. Depending on workload demands and their e-business needs, customers choose when to deactivate capacity.

This capability is also designed to provide a reality-based, cost-efficient way to estimate customers’ revised capacity needs and determine whether they need permanent capacity resources.

**Question:**
What may be ordered on September 15, 2003 and October 7, 2003 using this On/Off CoD offering?

**Answer:**
On September 15, 2003, On/Off CoD enablement (FC 9896) may be ordered and temporary capacity CP upgrades may be ordered and installed via this offering on z990 machines. Beginning on October 7, 2003 temporary capacity IFL (Integrated Facilities for Linux) may be ordered and installed on customers’ z990 machines.

**Question:**
How many temporary CPs may a customer order with On/Off CoD on September 15, 2003?

**Answer:**
A customer may order CPs up to the number of permanently purchased CPs on a given machine.

**Question:**
What may be ordered on October 7, 2003 using this On/Off CoD offering?

**Answer:**
On October 7, 2003 end users may order and install temporary IFLs (Integrated Facilities for Linux) on their z990 machines.

**Question:**
How many temporary IFLs may a customer order with On/Off CoD on October 7, 2003?

**Answer:**
A customer may order IFLs up to the number of permanently purchased IFLs on a given machine.

**Question:**
How does the zSeries On/Off CoD offering differ from the IBM @server iSeries™ On/Off CoD offering?

**Answer:**
The zSeries On/Off CoD offering is delivered via the zSeries Customer Initiated Upgrade infrastructure, whereas the iSeries On/Off CoD offering is delivered differently.
**Question:** How does the zSeries On/Off CoD offering differ from the IBM pSeries® On/Off CoD Offering?

**Answer:**
pSeries will offer two forms of On/Off CoD. First is “Trial Capacity on Demand,” where the users can activate additional engines or memory for up to 30 days, and then can either purchase them permanently or deactivate them until they are purchased permanently. Second is a “phone card” approach, where the end user can make an advanced purchase of temporary engine usage time on a given machine, then active additional engines until such time is fully depleted.

**Question:** Where can I go for more detailed information about the On/Off Capacity on Demand for zSeries?

**Answer:** Consult your IBM sales or pricing representative for further information.

**Question:** Can I apply some portion of On/Off CoD payments to the purchase of permanent upgrades?

**Answer:** No.

**Question:** What is the price of the one-time enablement?

**Answer:** See the announcement for your country.

**Question:** Why are there limitations / restrictions between On/Off CoD and Capacity BackUp (CBU)?

**Answer:** IBM utilizes CBU-based technology to deliver On/Off CoD. While the On/Off CoD enablement (FC 9896) can be installed on a CBU machine, restrictions between the installation/activation of a temporary capacity upgrade and presence of CBU are necessary to preserve the end user’s requirement for emergency computing capability via CBU.

**Question:** What is the restriction between CBU and On/Off CoD?

**Answer:** Because the CBU record and On/Off CoD activation record are based on the same LIC-CC technology, they can not coexist on the same machine. Therefore, while a machine can have CBU and On/Off CoD enablement (FC 9896) at the same time, the user can not install/activate a temporary capacity upgrade without physically removing the CBU record from the machine. Once the temporary capacity is deactivated, the CBU record may be restored on the machine.
While the CBU record is removed from the machine, the machine will not have the ability for CBU activation (test or emergency) until the CBU record is reinstalled on the machine.

**Question:**
How does my customer reinstall a CBU record that has been removed from a machine?

**Answer:**
The CBU capability should be reordered for that machine. Because the customer has already signed a CBU contract for this machine, there is no need to resign the CBU contract.

**Question:**
If my customer removes a machine’s CBU record, does he have to pay the upfront CBU fees again when the record is reinstalled?

**Answer:**
No, his machine is already entitled to have the CBU capability, since he has already paid the upfront CBU fees and has signed a CBU contract. However, when CBU is reinstalled on a machine, the CBU offering will still expire 5 years from the date that it was originally installed.

**Question:**
What contracts have to be signed when my customer wants to add On/Off CoD enablement (FC 9896) to his machine?

**Answer:**
“IBM Customer Agreement, Attachment for Customer Initiated Upgrade and IBM @server On/Off Capacity on Demand” provides the base set of terms supporting both On/Off CoD and CIU, including the CIU-Express option. For support of On/Off CoD, the customer must have signed that contract for his enterprise in the specific country where On/Off CoD is to be installed. In addition, “IBM Customer Agreement, Supplement for Customer Initiated Upgrade and IBM eServer On/Off Capacity on Demand II” (for most instances) or “IBM Customer Agreement, Supplement for Customer Initiated Upgrade and IBM eServer On/Off Capacity on Demand” (when the capability is sold directly by IBM for a machine owned by a non-IGF third party) must be executed for the particular machine on which the On/Off CoD enablement feature (FC 9896) is to be installed.

**Question:**
How much will my customer pay for any temporary capacity that he activates?

**Answer:**
The price your customer will pay will be the price shown to him in the CIU application, or it will be the price provided by his authorized IBM Business Partner, as applicable. In either case, the price shown will be the “per unit of measure” price. The customer will be invoiced that price times the number of processors he uses, times the number of days he uses those processors during the most recent billing period, plus any applicable taxes and fees.
**Question:**
When will my customer be billed for use of temporary capacity?

**Answer:**
IBM will measure the amount of your customer’s usage of temporary capacity during a given billing period, then generate an invoice reflective of that. The billing period will vary by geography, typically being either monthly or quarterly.

**Question:**
What about additional software license service fees associated with use of temporary hardware capacity?

**Answer:**
IBM offers daily software charges for select IPLA software products to complement our On/Off Capacity on Demand (CoD) server offerings for zSeries. IPLA software products are those with a one-time license charge and ongoing maintenance fees. The daily On/Off CoD charges will apply to eligible IPLA products running on a server where customers activate the On/Off CoD server offering, to enable temporary engines. On z990, the daily charges are based on the amount of temporary capacity and the number of days that the temporary capacity is enabled.

Full-Capacity Monthly License Charge products will be charged based on the highest enabled capacity in a calendar month. Sub-Capacity Monthly License Charge products will be charged based on the highest observed rolling 4-hour average utilization.

**Question:**
My customer does not use IBM ITS for maintenance service, so he does not have an RSF connection for his zSeries machines. Can he still use On/Off CoD?

**Answer:**
On/Off CoD is only available on z990 machines. If your customer’s z990 is under IBM warranty, it can have an RSF connection, so On/Off CoD can be utilized. If your customer elects to not have an RSF connection, or if you customer elects to have a third-party maintainer service his z990 machine after the machine’s warranty expires, he will have to request an RPQ from IBM for On/Off CoD support.
**Question:**
My customer uses IBM ITS for maintenance service, but elects to not have an active RSF connection for his z990 machine. Can he still use On/Off CoD?

**Answer:**
Yes, but your customer will have to request an RPQ from IBM for On/Off CoD support.

**Question:**
My customer has an RSF connection for his z990 machine. How frequently should his machine “call home” for On/Off CoD to work properly?

**Answer:**
Once your customer installs the On/Off CoD capability on a machine, he will be obligated to have his machine call home at least once every two calendar weeks. To avoid erroneous billing for On/Off CoD usage, your customer’s machine should also call home whenever there is a configuration change to the machine.

**Question:**
Can my customer add the On/Off CoD capability to a machine he has acquired from an authorized IBM Business Partner?

**Answer:**
Yes. First, in order to sell On/Off CoD capability, the IBM Business Partner must execute the appropriate On/Off CoD IBM Business Partner Agreement Attachment, as described in the IBM Business Partner Agreement Exhibit.

In addition, your customer will have to sign the appropriate end user agreements required for On/Off CoD.

When your customer wants to add temporary capacity to his machine, his IBM Business Partner will provide him with pricing and any specific terms and conditions pertaining to that sale.

Once your customer has the pricing and knowledge of any additional terms associated with On/Off CoD usage, your customer can order, download and install a temporary upgrade through the IBM CIU facility found on the Resource Link™ Web site. Your customer will then be invoiced by his IBM Business Partner for any On/Off CoD usage.

**Question:**
How does On/Off CoD work when the base z990 machine is leased?

**Answer:**
Because On/Off CoD is temporary in nature, with periodic billing, IBM will invoice the end user directly for any use of temporary capacity, even if the machine is owned by a third party (including IBM Global Financing). If your customer wants to finance any charges associated with On/Off CoD, he should consult with IBM Global Financing or another third party.
**Question:**
What are my customer’s obligations when his z990 lease expires?

**Answer:**
Your customer must order the removal of the On/Off CoD enablement feature (FC 9896) and the removal of the CIU enablement feature (FC 9898) from his machine prior to any transfer of the machine back to the lessor.

**Question:**
What are my customer’s obligations when he sells his z990 machine which he owns outright?

**Answer:**
Your customer must order the removal of the On/Off CoD enablement feature (FC 9896) and the removal of the CIU enablement feature (FC 9898) from his machine prior to any sale or other transfer of the machine to another party. Transfer within the same enterprise does not require these removals.

**Question:**
How is "Capacity on Demand" enabled? For example: is this accomplished by the Operator/System Programmer, does IBM have to intervene via microcode changes, or via some automation mechanism between the machine and IBM?

**Answer:**
Permanent Capacity on Demand (permanent upgrade of additional CPs, IFLs, ICFs, SAPs, Memory) requires either that Customer Initiated Upgrade (CIU) be enabled on a machine (any zSeries) for automated end-to-end configuration-order-build-ship-install of a LIC-only upgrade, or that an order be placed through the customer’s sales contact and shipped/installed BAU.

For CIU, customer must order and have IBM install the CIU enablement feature code (FC 9898). The presence of this feature code is sensed via VPD.

On/Off Capacity on Demand (for temporary use of additional CPs and IFLs; z990 only) also requires that the CIU enablement (FC 9898) be installed on a machine, and that the On/Off COD enablement feature (FC 9896) be ordered and installed by IBM on the same machine. Like 9898, the On/Off CoD enablement feature is also sensed via VPD.

For both Permanent and Temporary capacity, once the capabilities are enabled on a machine (per the above), the customer is able to configure, order and install the upgrade via IBM's CIU facility. The configure and order steps are done via the Web (IBM ResourceLink CIU Application). The install step is automated and done via IBM's Remote Support Facility (machine dial up connection to the IBM RETAIN database).

Both types of upgrades are implemented via Licensed Internal Code (LIC) modifications. Using the machine's RSF connection, the customer initiates the download of the new LIC. The LIC then automatically installs on the machine, upgrading it as ordered by the customer.

LIC for temporary capacity automatically installs on the base machine upon download. LIC for permanent capacity can either automatically install upon download, or that auto-install can be
deferred by the customer, but either way IBM considers the upgrade to be installed upon
download.

For machines without an active RSF connection (either because IBM does not provide
maintenance service for that machine or because the customer chooses to not take advantage of
this capability), IBM does intend to provide an alternate means by which the customer can install
temporary capacity on his z990 machine. This alternate means will provide the same On/Off
CoD capability to the customer, but will not deliver the temporary capacity upgrade with the
same speed or degree of automation.