

Modular Components Steve Gillaspay

My name is Steve Gillaspay and I am going to walk you through the modular components that make up the HP BladeSystem c-Class product line.

HP BladeSystem offers the same features, performance and workloads as the trusted HP ProLiant and Integrity rackmount servers, while adding redundancy and new technologies to reduce time and costs.

When you slide a server into the intelligent BladeSystem enclosure...

You automatically get redundant and integrated power, cooling and management.

You also get innovative HP technologies such as Virtual Connect, Thermal Logic power and cooling and Insight Control management that are designed to make your BladeSystem easier to use and more cost-effective to own.

With HP BladeSystem:

- The more you integrate, the more you can reduce costs and improve availability.
- The more you virtualize your IT environment, you can better
 - utilize resources,
 - reduce space and
 - reduce power consumption.

and
• The more
you automate tasks,
the more you reduce
the on-going cost
of operations.

Now let's take a look at
some of the
individual features and
capabilities
of this highly integrated BladeSystem enclosure.

The HP BladeSystem
c7000 enclosure
is 10 units high and
is designed to support
a mix of up to 16 server or storage blades.

The server blades available for the
HP BladeSystem c-Class
offer twice the features and density of other
blade solutions
currently available
on the market.

Server blades come in
both half-height and
full-height form factors and,
as I mentioned before,
offer the same features and performance
as HP ProLiant and
Integrity rack servers.

Unlike competitive offerings,
all HP blades support
hot-plug SAS drives connected to an HP SmartArray controller,
higher memory expansion,
and multiple I/O slots
for fabrics
(point to blade features)
such as
Fibre Channel,
Ethernet and Infiniband.

In addition to server blades,

HP BladeSystem c-Class supports storage blades.

This includes a direct attach storage blade for adding up to 6 hot-plug SAS or SATA drives to a server blade.

In the future you will also be able to add modular and scalable storage solutions within the enclosure.

The enclosure includes integrated, redundant power available in either single phase or 3 phase models.

HP Insight Display, included as part of the Onboard Administrator, provides easy setup and configuration, right from the front of the enclosure.

The enclosure incorporates HP Thermal Logic technology to provide redundant and scalable cooling airflow to all components in the enclosure.

The design also features hot-pluggable and redundant Active Cool fans.

The Active Cool fans feature new HP technology, with more than 20 patents pending, that offers superior air flow and power efficiency.

HP BladeSystem greatly enhances the variety and performance of interconnect options.

The rear of the enclosure includes Interconnect Bays, accommodating 8 single-wide, or 4 double-wide,

interconnect modules.

(Plug in switch)

All of the
interconnect modules
plug directly into these interconnect bays.

If you need redundancy,
then you can use two of the same kind of module,
side-by-side.

HP BladeSystem offers
many interconnect choices
to connect Ethernet,
Fiber Channel and
Infiniband
to your network.

And HP BladeSystem
c-Class offers a new
kind of interconnect called Virtual Connect.

It is simply the best connection to your networks.

For more information
on Virtual Connect
please refer to that module on this CD.

With redundant HP Onboard Administrator Enclosure
Management,
HP Integrated Lights Out Server Management and HP Insight Control,
you can manage your servers and enclosures
locally and remotely,
and take complete control of the device
regardless of the state of the server operating
system.

Thank you for your time.
And please make sure
you view the other
modules for more details.

With managed switch modules that plug into the bays, you can reduce your cable count using your favorite brand of Ethernet and Fibre Channel switches.

You can also get InfiniBand connectivity for workloads that need a high bandwidth, low latency connection.

HP continues to offer Ethernet and Fibre Channel pass-thru modules for those situations where you must have direct 1 to 1 connections between your servers and LAN and SAN.

Taking into account the cost of cables, transceivers, director-class switch ports, and on the like, the pass-thru approach is generally the most expensive connection alternative.

And the HP BladeSystem c-Class offers a new kind of interconnect, called Virtual Connect.

It is simply the best connection to your networks.

For more information on Virtual Connect, please refer to the module on this CD.

With HP Onboard Administrator Enclosure Management, HP iLO Server Management and HP Insight Control, you can manage your servers and enclosures locally or remotely, and take complete control of the device regardless of the state of the server operating system.

The enclosure is available in both single-phase and three-phase power versions.