IBM HACMP Smart Assist for WebSphere simplifies integration of business-critical applications with world-class high availability on IBM @server pSeries servers

Overview

IBM HACMP Smart Assist for WebSphere brings you the best in configuration and setup aids to help complete your WebSphere application environments. The WebSphere Application Server Network Deployment, Tivoli Directory Server (TDS), and DB2® components are all inherently highly available, but with the addition of the HACMP clustering product, your solutions significantly reduce your exposures to downtime or outages.

WebSphere application environments are among the best of breed when it comes to deploying Web-enabled application environments. HACMP is a premier high availability and disaster recovery solution for your pSeries® based WebSphere servers. It provides monitoring and recovery mechanisms to help ensure that critical servers and infrastructure components are adequately recovered when there is a failure, or when you need to perform maintenance on your production environments.

By combining these two powerful and feature-rich products, your IT staff will be better able to keep your critical business applications running 24 x 7.

With HACMP Smart Assist for WebSphere, your IT staff can more easily integrate and configure an optimal environment that will deliver on demand resources to your end users. The WebSphere platform provides your applications with load balancing, dynamic reconfiguration, and system management of the application servers. HACMP brings additional high availability features such as monitoring of the WebSphere internal components and ensuring that all necessary system resources are readily available on backup servers. Fine tuning this environment is every IT manager’s goal. With the HACMP Smart Assist for WebSphere, that job just got easier.

Key prerequisites

The following IBM powerhouse technology is used:

• HACMP V5.1, or later
• WebSphere V5.0, or later
• AIX® 5L V5.1 or V5.2, or later

Planned availability date

May 21, 2004

At a glance

IBM HACMP Smart Assist for WebSphere helps your professional IT staff more easily configure a higher level of availability for your on demand solutions.

• Provides auto-discovery of your HACMP and WebSphere environments and creates appropriate configuration information for both
• Reduces application downtime caused by system outages, natural disasters, or planned maintenance
• Utilizes a built-in knowledge base to produce more efficient solution configurations
• Reduces the time your IT professionals invest in understanding the infrastructure and enables them to spend more time developing and improving applications
• Reduces the time your IT professionals invest in creating and maintaining configuration data
• Tightly integrates two powerhouse technologies from IBM to launch your application environment into the on demand world

For ordering, contact:
Your IBM representative, an IBM Business Partner, or the Americas Call Centers at 800-IBM-CALL

Reference: RE001
WebSphere: Among the best-of-breed platform for IBM e-business. HACMP: Among the best-of-breed availability for pSeries. Combining the power of these two leading technologies to create a highly available e-business platform on AIX 5L just got easier with HACMP Smart Assist for WebSphere.

WebSphere has availability strategies for most services. HACMP Smart Assist for WebSphere builds upon those strategies to deliver even higher levels of availability for your WebSphere environment by integrating the power of HACMP for AIX 5L for monitoring and recovering from failures of system-level services and components.

HACMP expands auto-discovery features to simplify and streamline the configuration process. These auto-discovery features automatically detect components of your system and nominate them for configuration into HACMP; components such as networks (IP and point-to-point), network adapters and devices, volume groups, and file systems.

HACMP Smart Assist for WebSphere helps you configure HACMP to improve the availability of four services associated with WebSphere environments:

- WebSphere Application Servers
- WebSphere Application Server Network Deployment (Deployment Manager)
- DB2
- Tivoli Directory Server (TDS)

For each of these services that you choose to protect in your WebSphere environment, HACMP Smart Assist will scan your existing WebSphere and HACMP configurations. It will then draw upon its own knowledge base of optimal integrations for the two products, and automatically create the HACMP configuration necessary to monitor the WebSphere services and recover from failures. The net result is reduced time and effort to configure the highest levels of availability for your WebSphere environment. That means more time for you to focus on other important functions to drive and support your on demand business.

HACMP Smart Assist for WebSphere does not replace HACMP or WebSphere, but rather supplements them. You must install and configure WebSphere so that HACMP Smart Assist can gather the information required to protect your WebSphere services. You must install HACMP on the systems you want to be clustered, and configure your base network topology for the cluster. This enables HACMP Smart Assist to determine which systems are available to configure as backup for WebSphere services to be protected.

When the services have been configured with HACMP Smart Assist, they are automatically controlled and protected by the proven availability features of HACMP. Processes such as Deployment Manager are automatically monitored and restarted upon failure. If restarting a process is not successful on the current system, then it is automatically migrated to a takeover system. The system recovers these services so you don’t have to.

For larger events such as system outage, HACMP will automatically migrate the protected services to a backup system to continue operations. This means protection for WebSphere, allowing continued access of your data right up to the point of failure or planned maintenance. Just as important as the database is recovering data associated with WebSphere Application Server processing. Configuring WebSphere Application Servers into HACMP allows a recovery instance to retrieve and roll back in-flight transactions for a failed instance so that processing can continue with limited disruption.

HACMP V5 is simpler, faster, and goes the distance. Now with HACMP Smart Assist, you can easily integrate these world-class availability capabilities into your WebSphere environment, along with AIX 5L, the most robust production UNIX® operating system in the market.

HACMP and WebSphere Application Server Network Deployment Integration: HACMP and WebSphere Application Server Network Deployment have complementary high availability functionality. WebSphere Application Server Network Deployment has detailed knowledge of the application server environment and can manage a deployment based on run-time loading characteristics, server availability, and content caching. But WebSphere Application Server Network Deployment is not designed for managing resources outside of the application server domain such as system-wide resources like storage devices and communication adapters, and third-party applications such as external authorization and authentication servers.

HACMP is very good at managing these system-wide resources, but not designed nor intended for micro-managing application servers and applications. Although there is some overlap in the high availability capabilities of both products, the integration effort fuses the strengths of each product to bring an increasing level of high availability to the customer’s application.

WebSphere Application Server Network Deployment increases the availability of a solution by:

- Implementing and managing a cluster of application servers
- Providing load balancing to clients for Web and application requests
- Allowing for integration with Tivoli® for security and centralized administration
- Dynamically reconfiguring the cluster based on input from node agents

HACMP increases the availability of a solution by:

- Monitoring the Deployment Manager and automatically restarting it on backup servers
- Monitoring third-party products (such as a Tivoli Directory Server "TDS") and automatically restarting them on backup servers if they fail
- Ensuring that all necessary system resources (for example, storage devices and IP addresses) are configured and made available on backup servers in support of application migration.

Deliverables: HACMP Smart Assist for WebSphere contains the following deliverables:

- A new harvesting application that will read and parse the WebSphere configuration files and configure HACMP.
- An application that reads the specific WebSphere objects and automatically creates or updates the WebSphere configuration files. This is needed to reflect the changes back to WebSphere.
- Custom resource groups that are preconfigured with all the applications comprising a WebSphere Basic and WebSphere-ND instance. These resource groups will act as a starting point when adding additional...
resources such as storage devices, communication adapters, and monitors.

- Custom resource groups for common third-party products such as Web servers, dynamic content engines, and authentication servers (like directory, RAS, and Radius).

- Complete end-user documentation.

**Accessibility by people with disabilities**

The following feature supports use by people with disabilities:

- Operation by keyboard alone

**Section 508 of the U.S. Rehabilitation Act**

HACMP Smart Assist for WebSphere is capable as of May 21, 2004, when used in accordance with IBM’s associated documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it.

**Trademarks**

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Offering Information

Product information is available through the Offering Information Web site at:

http://www.ibm.com/common/ssi

Publications

License Information and Proof of Entitlement information will display automatically when HACMP Smart Assist for WebSphere® is installed.

The new publication HACMP Smart Assist for WebSphere User Guide (SC23-4877) is supplied on CD-ROM with the basic machine-readable material.

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. Payment options for orders are via credit card (in the U.S.) or customer number for 50 countries. A large number of publications are available online in various file formats, and they can all be downloaded by all countries free of charge.

The IBM Publications Notification System (PNS)

http://service5.boulder.ibm.com/pnseage.nsf/messages/welcome

The PNS enables subscribers to set up profiles of interest by order number/product number. PNS subscribers automatically receive notifications by e-mail of all new publications defined in their profiles. These can then be downloaded via the Publications Center. The site is available in English and Canadian French.

Displayable softcopy publications: The publications for HACMP 5.1 are included as installation images on the installation media. After installation, the publications can be viewed or printed in PDF or HTML format. Refer to the release notes for information on how to access publications in PDF and HTML formats.

Technical information

Hardware requirements: HACMP Smart Assist for WebSphere V5.1.0 works with IBM pSeries® servers in a no-single-point-of-failure server configuration.

HACMP Smart Assist for WebSphere V5.1.0 supports the pSeries, Cluster 1600, and RS/6000® models designed for server applications and that meet the minimum requirements for internal memory, internal disk, and I/O slots.

Refer to the HACMP V5.1 (5765-F62) sales manual for a complete list of supported processors and devices.

Software requirements

- HACMP V5.1 (5765-F62) base feature, or later modification levels
- WebSphere Application Server V5.1 (D5CB9LL, D5ALTLL, D5ALBLL, D51JXLL, or D5AL3LL), or later modification levels
- AIX® 5L V5.1 (5765-E61) or V5.2 (5765-E62), or later modification levels

Limitations: The following limitations apply to HACMP Smart Assist for WebSphere:

- When protecting WebSphere Application Servers, only environments utilizing Network Deployment (that is, using Deployment Manager) will be configured into HACMP by HACMP Smart Assist.
- HACMP resource groups created by HACMP Smart Assist for any of the WebSphere components are limited to two nodes with cascading behavior. This assumes an unloaded standby system is available, with enough resources to assume the workload of the active system.
- Given the previous statement, a single standby system may be configured to protect multiple workloads, but is assumed to only effectively execute one workload at a time.
- For WebSphere configurations using an IBM HTTP Server (IHS) with application servers, HACMP Smart Assist will automatically configure the IHS to failover with the application server. This will require the administrator to place the IHS data on a shareable volume group that may be passed between nodes.

For WebSphere Application Server limitations, refer to the WebSphere announcement or sales manual applicable to your situation.

Planning information

Packaging

• This program is shipped on CD-ROM; media and publications are shipped under the 5692-A5L SPO.
• Proof of Entitlement (PoE) information to support this licensed program is provided in the License Information document, which will be displayed automatically when the HACMP Smart Assist for WebSphere feature is installed.
• Unlicensed documentation is included.

Security, auditability, and control

The announced program uses the security and auditability features of AIX 5L V5.1 and V5.2 for servers.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering information

HACMP Smart Assist for WebSphere is a server product that has one charge unit: Number of processors. The number of processors is the sum of the number of active processors in each of the machine type-models on which HACMP Smart Assist for WebSphere will be installed or run. A license for HACMP V5 and a license for HACMP Smart Assist for WebSphere is required for each machine on which HACMP Smart Assist for WebSphere will be installed and run.

Software Maintenance for HACMP V5 and HACMP Smart Assist for WebSphere (5771-HMP or 5773-HMP) should be ordered in a quantity equal to the sum of the number of active processors in each of the machine type-models on which HACMP V5 and HACMP Smart Assist for WebSphere will be installed and run.

Program name: HACMP Smart Assist for WebSphere

New licenses

To order the programs described in this announcement, specify the machine type-model number, order type description, media feature number, and desired one-time charge (OTC) feature (maximum of 250 per feature number) from the following table.

<table>
<thead>
<tr>
<th>Description</th>
<th>Type-model number</th>
<th>OTC billing feature number</th>
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</thead>
<tbody>
<tr>
<td>Optional HACMP Smart Assist for WebSphere Feature (HACMP 5.1.0 license required): Per processor with 1-Year Software Maintenance</td>
<td>5765-F62</td>
<td>0009</td>
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<tr>
<td>Per 250 processors with 1-Year Software Maintenance</td>
<td>5765-F62</td>
<td>0010</td>
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</table>

Software maintenance

This software license includes Software Maintenance, previously referred to as Software Subscription and Technical Support.

All distributed software licenses include Software Maintenance for a period of 12 months from the date of acquisition. Extending coverage for a total of three years from the date of acquisition may be elected. Order the program number, feature number, and quantity to extend coverage for your software licenses. If maintenance has expired, specify the after-license feature number.

Software Maintenance replaces Software Subscription for AIX (5692-SSO) for new and expired contracts. Refer to Software Announcement 202-003, dated January 8, 2002.

To register for future upgrades of products from Software Maintenance for programs described in this announcement, specify 5771-HMP for one-year registration or 5773-HMP for three-year registration, and the applicable HACMP Smart Assist for WebSphere billing feature with quantity equal to the number of active installed processors in the machine type-model that is running HACMP V5.

Notes

• The following billing features either (one of these):
  - Must have been previously purchased and must currently be on a customer’s record as proof of eligibility to receive this upgrade and future upgrades at no charge.
  - May be purchased to receive future releases of this product for no charge; order the program number, feature number, and quantity to obtain coverage for your software licenses.

• The appropriate one-year registration feature (no additional charge feature) will transfer automatically to the customer order record when one-year 5771-HMP is selected.

• Customers should select the “Renewal Billing Feature” for one- or three-year contract renewal.

• Customers should select the “Maintenance After License” to re-enter one of the programs after a contract has lapsed.
Software Maintenance Program Identification (PID) and features

1-Year 5771-HMP feature numbers

Use Authorizations (to be ordered in quantity)

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<tr>
<td>Per processor</td>
<td>0476</td>
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<tr>
<td>Per 250 processor</td>
<td>0477</td>
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<tr>
<td>1-Year Renewal</td>
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<tr>
<td>Per processor</td>
<td>0478</td>
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<td>Per 250 processor</td>
<td>0479</td>
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<td>1-Year After License</td>
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<tr>
<td>Per processor</td>
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<td>Per 250 processor</td>
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3-Year 5773-HMP feature numbers

Use Authorizations (to be ordered in quantity)

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<td>High Availability Cluster Multi-Processing V5.1 HACMP Smart Assist Feature Software Maintenance Registration</td>
<td>5957</td>
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<tr>
<td>Per processor</td>
<td>0428</td>
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<tr>
<td>Per 250 processor</td>
<td>0429</td>
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<td>3-Year Renewal</td>
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<tr>
<td>Per processor</td>
<td>0430</td>
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<tr>
<td>Per 250 processor</td>
<td>0431</td>
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<tr>
<td>3-Year After License</td>
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<tr>
<td>Per processor</td>
<td>0432</td>
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<tr>
<td>Per 250 processor</td>
<td>0433</td>
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Customization options: Select the appropriate feature numbers to customize your order with delivery options desired. These features can be specified on the initial or MES orders.

To receive shipment of machine-readable materials stacked on a CD-ROM requires an SPO (5692-A5L). Billing for the media type selected is generated under the SPO. To prevent additional billing expenses, place only one SPO order per machine.

Select one of the following (5692-A5L) feature numbers for the licensed program hardcopy entitled publications to be shipped on a given date.

**HACMP Smart Assist for WebSphere 5.1 5692-A5L SPO feature numbers**

<table>
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<th>Program name</th>
<th>Program number</th>
<th>Feature number</th>
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<tr>
<td>IBM High Availability Cluster Multi-Processing for AIX 5L, Version 5.1.0 HACMP Smart Assist for WebSphere Feature</td>
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Under SPO 5692-A5L, feature number 3470 can be used to suppress hardcopy documentation. To order entitled hardcopy documentation only, order feature number 3430.

**Terms and conditions**

**Agreement:** IBM International Program License Agreement. Proofs of Entitlement are required for all authorized use.

This software license includes Software Maintenance, previously referred to as Software Subscription and Technical Support.

The following agreements apply for maintenance and do not require customer signatures:

- IBM Agreement for Acquisition of Support (Z125-6011)
- Addendum for Support (Software Maintenance) for Select iSeries™ and pSeries Programs (Z125-6495)

**Limited warranty:** Yes

**Warranty:** This program has warranty for a minimum of one year from acquisition from IBM or authorized IBM Business Partner. The warranty provided to the customer, for at least one year from acquisition, is access to databases (read Web sites) for program information, FAQs, including any known fixes to defects, which the customer can download or obtain otherwise and install at leisure.

**Program technical support:** Technical support of a program product will be available for a minimum of three years from the general availability date, as long as your Software Maintenance is in effect. This technical support allows you to obtain assistance (via telephone or electronic means) from IBM for product-specific, task-oriented questions regarding the installation and operation of the program product. Software Maintenance also provides you with access to updates, releases, and versions of the program. Customers will be notified, via announcement letter, of discontinuance of support with 12 months’ notice. If you require additional technical support from IBM, including an extension of support beyond the discontinuance date, contact your IBM representative or IBM Business Partner. This extension may be available for a fee.
Money-back guarantee: If for any reason you are dissatisfied with the program, return it within 30 days from the invoice date to the party (either IBM or its reseller) from whom you acquired it for a refund. This applies only to your first acquisition of the program.

Copy and use on home/portable computer: No

Volume orders (IVO): Yes, contact your IBM representative.

Passport Advantage® applies: No

Usage restriction: Yes

Software maintenance applies: Yes

All distributed software licenses include Software Maintenance (Software Subscription and Technical Support) for a period of 12 months from the date of acquisition, providing a streamlined way to acquire IBM software and assure technical support coverage for all licenses. Extending coverage for a total of three years from date of acquisition may be elected.

While your Software Maintenance is in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions and code-related questions. IBM provides assistance via telephone and, if available, electronic access, only to your information systems (IS) technical support personnel during the normal business hours (published prime shift hours) of your IBM support center. (This assistance is not available to your end users.) IBM provides Severity 1 assistance 24 hours a day, every day of the year. For additional details, consult your IBM Software Support Guide at:

http://techsupport.services.ibm.com/guides/handbook.html

Software Maintenance does not include assistance for the design and development of applications, your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under this agreement.

IBM operational support services — SoftwareXcel: No

AIX/UNIX® upgrade protection applies: No

Entitled upgrade for current AIX/UNIX upgrade protection licensees: No

iSeries Software Subscription applies: No

Variable charges apply: No

Educational allowance available: Yes, 15% education allowance applies to qualified education institution customers.

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### Prices

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<th>Type-model number</th>
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<td>1-Year 5771-HMP feature numbers</td>
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</table>
To order, contact the Americas Call Centers, your local IBM representative, or your IBM Business Partner.

To identify your local IBM representative or IBM Business Partner, call 800-IBM-4YOU (426-4968).

Phone: 800-IBM-CALL (426-2255)
Fax: 800-2IBM-FAX (242-6329)
Internet: ibm_direct@vnet.ibm.com
Mail: IBM Americas Call Centers
Dept: IBM CALL, 6th Floor
105 Moatfield Drive
North York, Ontario
Canada M3B 3R1

Reference: RE001

The Americas Call Centers, our national direct marketing organization, can add your name to the mailing list for catalogs of IBM products.

**Note:** Shipments will begin after the planned availability date.

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