



Domino 8 for System i

Changes and updates to Domino 8 for System i

Lotus software



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Welcome to the education session, Changes and Updates to Domino 8 for System i

Agenda

- Domino® 8 for System i Requirements
 - ▶ IBM i5/OS
 - ▶ Program Temporary Fix (PTF)
 - ▶ Hardware
- On-Disk Structure (ODS)
 - ▶ Implementation
 - ▶ Enhancements
- Updated Commands

This education session covers the software requirements for Domino 8 on System i starting with the i5/OS licensed programs, recommended PTFs and then moves on to hardware requirements. It will also take you through the changes required to implement the new On-Disk Structure (ODS) and the benefits of this new structure. In addition to the requirements for a smooth implementation and improved performance, this presentation will also provide you with information on a couple of updated commands specific to System i

Agenda

- Unsupported Domino 8 features
- Additional resources

You will be presented with a list of unsupported features for the System i platform, followed by with additional resources that provide you with detailed information on new features for both Client and Server and specific requirements for each. The additional resources will also cover operational questions on add-in product compatibility, i5/OS requirements and fix information specific to your environment.

Domino 8 for System i requirements

- IBM® i5/OS
 - ▶ i5/OS V5R4 only
 - ▶ i5/OS Host servers, 5722SS1 option 12
 - ▶ TCP/IP Connectivity Utilities for i5/OS, 5722TC1
 - ▶ IBM Developer Kit for Java™, 5722JV1 *Base
 - ▶ J2SE 5.0 32 bit or JDK 5.0
 - J2SE 5.0 32 bit (5722JV1, option 8) requires Portable Application Solutions Environment (PASE)
 - JDK 5.0 (5722JV1, option 7) requires the following notes.ini parameter: JavaUseClassicJVM=1

Domino 8 for System i requires V5R4 of i5/OS, and this is the only release of the Operating System to support this Domino version. If you are considering an i5/OS upgrade, Domino 7.0.3 or 8.0.1 will be required for V6R1. The following i5/OS options and licensed programs are required to install Domino 8 for System i: Host Servers (which is option 12 of the Operating System), licensed program 5722TC1 and TCP/IP Connectivity utilities for i5/OS. The Base of the IBM Java Developer kit, 5722JV1, in addition to either option 7 or 8 of the Java Developer kit. Prior to Domino 8, Domino used one specific option or version within the Java Developer Kit. In Domino 8 you will use either option 8, which is the recommended version of the Java Developer Kit or option 7. When you choose option 8 you must also have “Portable Application Solutions Environment”, often referred to as PASE, installed. PASE is option 33 of the i5/OS (5722SS1). Should you choose to use option 7 of the Java Developer Kit, the JavaUseClassicJVM=1 notes.ini parameter will be required.

Domino for System i requirements

- IBM i5/OS
 - ▶ i5/OS QShell, 5722SS1 option 30
 - ▶ Optional requirements:
 - If you plan to use Web services
 - i5/OS IBM HTTP Server, 5722DG1
 - If you plan to manage the Domino environment using System i Navigator, the following i5/OS Licensed Programs are required:
 - IBM iSeries® Access™ Base, 5722XW1
 - IBM iSeries Access for Windows®, 5722XE1

QShell is the final Operating System option required. The licensed programs that follow are optional based on the tasks and functions required within your Domino environment. If you plan to use Web Services, i5/OS IBM HTTP Server, 5722DG1 is required. If you intend to manage your Domino environment with System i Navigator, you will need IBM iSeries Access Base option, licensed program 5722XW1 and IBM iSeries Access for Windows, licensed program 5722XE1.

Domino for System i requirements

■ IBM i5/OS

▶ Optional requirements:

- If you plan to redirect traffic from i5/OS IBM HTTP to Domino:
 - IBM HTTP Server plug-in for Domino
 - Refer to [Lotus Domino for i5/OS](#)
- If you plan to use or develop applications requiring the C API:
 - Lotus® Domino 8 C API, 5733LD8 option 1
- Application development with Domino 8:
 - i5/OS System Openness Includes, 5722SS1 option 13
 - ILE C Compiler, 5722WDS option 51

In addition to the options for managing your Domino environment, there are also workflow and Application Development options and requirements. If you plan to redirect i5/OS IBM HTTP traffic to Domino, you will need the IBM HTTP Server plug-in for Domino. The plug-in, requirements and the installation process can be found at the URL listed on this slide. If your company plans to use or develop applications requiring the C Application Programming Interface, commonly referred to as C API, then you must install the Domino 8 C API, 5733LD8, option 1. And finally, if your company plans to use Domino 8 for application development, you will be required to install both i5/OS System Openness Includes, which is option 13 of the i5/OS Operating System and ILE C Compiler, 5722WDS which is option 51.

Domino 8 for System i requirements

▪ PTFs

- ▶ Latest Cumulative PTF package
 - Minimum of SF99540 Level 7107 which includes SI24683
- ▶ Hiper Group PTF - SF99539 (V5R4) or SF99609 (V6R1)
- ▶ Java Group PTF - SF99291 (V5R4) or SF99562 (V6R1)
- ▶ TCP/IP Group PTF - SF99315 (V5R4)
- ▶ Optional dependant on features installed:
 - Latest Service Pack for iSeries Access for Windows
www.ibm.com/servers/eserver/series/access/casp.html
 - IBM HTTP Server Group PTF - SF99114 (V5R4)
 - Includes the required PTF SI19429 or its supersede

Once all of the required and optional licensed programs have been installed, you should install the appropriate Program Temporary Fix (PTF) package or group as they apply to your environment. The latest Cumulative PTF package, with an absolute minimum level of 7107 for V5R4 e PTF are required for all installations. This package is the first to include the required PTF, SI24683 for V5R4. You should also install the Hiper, Java, and TCPIP/IP server group PTFs. The PTF number varies by release. Refer to the appropriate number listed on this slide for your i5/OS release. As of the writing of this document, the group PTF number for the TCP/IP and HTTP group PTFs for V6R1 had not been determined. The HTTP server group PTF and the latest Service Pack for iSeries Access for Windows may also apply to your environment based on the licensed programs installed. You can download this package from the URL listed on this slide.

Domino 8 for System i requirements

Hardware

- ▶ IBM iSeries model 270, 8xx, or eServer™ i5 model 520 and above:
 - Recommended models:
 - eServer i5 520-0901 and above
 - iSeries 270, 810, 820, 825, 800-2464 and above
 - Although a Domino server can run on any POWER™ model, the iSeries server models are optimized for client/server applications such as Domino.
 - iSeries 270, 800-2464, 810-2465, and eServer i5 520-0901 are recommended for Notes-based mail or light applications only.
 - Partial processor models may not be suitable for compute-intensive applications; IBM eServer i5 520-0902 or higher recommended for CPU-intensive workloads.
- ▶ Memory requirements
 - 512 MB or more per Domino server
- ▶ Disk requirements
 - 2GB of free space minimum; 4 or more drives recommended
- ▶ Refer to the Workload Estimator
 - <http://www-912.ibm.com/wle/EstimatorServlet>

IBM iSeries model 270, 8xx, or eServer i5 model 520 and above hardware is required for Domino 8 on System i. The recommended models are eServer i5 520-0901 and above, iSeries 270, 810, 820, 825, 800-2464 and above. Although a Domino server can run on any POWER model, the iSeries server models are optimized for client/server applications such as Domino. iSeries 270, 800-2464, 810-2465, and eServer i5 520-0901 are recommended for Notes-based mail or light applications only. Partial processor models may not be suitable for computer-intensive applications; IBM eServer i5 520-0902 or higher is recommended for CPU-intensive workloads. Be aware that the memory and disk requirements provided are minimum recommendations. The Workload Estimator should be used for an accurate assessment of requirements. The Workload Estimator tool can be found at the link listed on this slide.

On-Disk Structure (ODS)

Implementation

- ▶ ODS 48 requires the notes.ini parameter: CREATE_R8_DATABASES=1
 - The parameter is for both Notes and Domino, without the parameter new databases is created with an ODS of 43 (Version 6/7 ODS)
 - The parameter is dynamic on the Domino server with "set config"
 - Existing databases will require copy-style Compact to upgrade the ODS once the notes.ini parameter is enabled.

Enhancements

- ▶ Reduction in database size
 - Database using mail8.ntf and ODS 48 required less than half the disk space of the same design using ODS 43.
- ▶ Improved performance
 - Reduced CPU
 - Reduced I/O
- ▶ Improved logging of user activity
 - Additional detail
 - Adds, Updates and Deletes

Domino 8 has a new on-disk structure. The new structure, 48, is not the default. Previous versions of Domino performed the on-disk structure upgrade automatically with the Compact task. In Domino 8, the new structure is only created when the CREATE_R8_DATABASES=1 notes.ini parameter is used on the Notes client or Domino server creating the database. The parameter is dynamic on the Domino server and can be enabled using the "set config" command from the Domino console. The notes.ini parameter and copy-style Compact are required to upgrade existing databases. The on-disk structure upgrade is optional in Domino 8. The use of the Domino 6 or 7 on-disk structure (43) will not cause performance problems as experienced in earlier versions of the Domino product. The new on-disk structure does offer improved performance, and significant reductions in I/O, CPU and disk storage requirement. The improvement is evident in an environment with Domino 6 or 7 design elements. The greatest benefit occurs when the design and on-disk structure are both Domino 8. Disk requirements were lowered as much as 58% for a new Domino 8 mail file with the new structure versus that of a Domino 6 or 7 structure. In addition to performance and storage improvements, details were added to User activity logging, which now includes adds, updates and deletes.

Domino commands

▶ CFGDOMSVR and CHGDOMSVR

- Support for new system value introduced in V5R3, QTIMZON
- *SYSVAL, the new default value is based on the QTIMZON system value.
 - The TIMEZONE keyword was modified to accept a new value, *SYSVAL
 - This will be set to the current system value and will not toggle with any future changes to the system value.
 - The DAYSAVTIME keyword was modified to accept a new value *TIMEZONE
 - This will be set to the current system value and will not toggle with any future changes to the system value.
 - *TIMEZONE cannot be specified if *SYSVAL is not specified on the TIMEZONE parameter. This would result in an error of LNT0260.

Domino 8 took another step to use Domino integration with the i5/OS improvements introduced in V5R3. The CFGDOMSVR and CHGDOMSVR commands were updated. Domino will now support the new QTIMZON system value introduced in V5R3. The TIMEZONE keyword was modified to accept a new *SYSVAL value. The TIMEZONE keyword is the setting that defines the time zone for the server. Using the *SYSVAL setting will set the server to the current system value and will not toggle with any future changes to the system value. The DAYSAVTIME keyword was modified to accept a new value *TIMEZONE. This keyword tells the server whether or not to observe daylight saving time. This setting will now be set to the current system value. It will not toggle with any future changes to the system. The *TIMEZONE value cannot be specified for the DAYSAVTIME keyword if *SYSVAL is not specified on the TIMEZONE parameter. This results in an error of LNT0260.

Obsolete and unsupported Domino 8 features

- The directory and contents of domino/SametimeApplets is obsolete
- DB2® data store
 - ▶ Related Query View and Domino Access View capabilities
- Integration with and forwarding events to the Tivoli Enterprise™ console
- Domino-Portal Integration (DPI) Wizard
- Fault Recovery restart in less than 30 seconds with Full NSD
- xSP hosting has been removed
 - ▶ CFGDOMSVR and CHGDOMSVR commands ignore the XSP(*YES) setting.

Once your Domino server on System i is upgraded to Domino 8, the domino/SametimeApplets directory (if it exists) becomes obsolete and the directory and its content can be deleted. The following Domino 8 features are not supported on the System i platform: (1) The DB2 data store, including the related Query View and Domino Access View capabilities. (2) Integration with and events forwarding to the Tivoli Enterprise console. (3) Domino-Portal Integration (DPI) Wizard. (4) Fault Recovery restart in less than 30 seconds with Full NSD.

Since Domino on i5/OS has always supported NSD and automatic recovery there is no change in functionality in Domino 8 on the i5/OS platform. NSD might run longer than 30 seconds, so you should let the NSD take the time it needs in order to gather all of the necessary debugging information. Finally, xSP hosting has been removed, so the CFGDOMSVR and CHGDOMSVR commands will ignore any value in the XSP setting or keyword.

Obsolete and unsupported Domino 8 features

- IPV6 support with i5/OS is available but limited; functions that require IPV4:
 - ▶ iSeries Navigator and iSeries Navigator Tasks on the Web
 - ▶ Java applications (including Java console)
 - ▶ HTTP (Apache) Plug-in
 - ▶ FTP

Though Domino 8 for System i and i5/OS provide support for IPV6, the iSeries Navigator and iSeries Navigator Tasks on the Web, Java applications (including Java console), HTTP (Apache) Plug-in and FTP functions require IPV4.

Additional resources

- Lotus Software for i5/OS compatibility guide:
<http://www.ibm.com/systems/i/software/domino/pdf/releasesupport.pdf>
- Required i5/OS fixes:
<http://www.ibm.com/systems/i/software/domino/support/ptf.html>
- IBM Lotus Notes® and Domino 8 Deployment Guide:
<http://www.redbooks.ibm.com/abstracts/sg247506.html?Open>
- IBM Lotus Notes and Domino 8 Reviewer's Guide:
<http://www.redbooks.ibm.com/abstracts/redp4359.html?Open>
- Checklist for upgrading to Domino 8 for i5/OS:
<http://www.ibm.com/support/docview.wss?rs=0&uid=swg21288332>
- IPV6:
<http://www.ibm.com/developerworks/library/wa-ipv6/index.html>
<http://www.ibm.com/systems/i/software/tcpip/functiontable.html>
<http://www-304.ibm.com/jct03001c/software/info/ipv6/index.jsp>

These resources will provide additional detail regarding Operating System and add-in software compatibility, required i5/OS fixes, feature requirements and high level information on IPV6.

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Lotus	Lotus Notes	POWER	System i	Tivoli Enterprise		

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