Level: All
Works with: Notes/Domino 5.0.x
Updated: 01-Aug-2003

Lotus has continued to enhance Notes/Domino in the MRs (Maintenance Releases, previously known as QMRs or Quarterly Maintenance Releases) and MUs (Maintenance Updates, previously known as QMUs or Quarterly Maintenance Updates) that have been released since 5.0 first came out in 1999. This article is a handy compilation of all the new enhancements that have been included in releases 5.0.1 through 5.0.12.

Please note that as a general rule, Lotus tries to avoid including new enhancements in our maintenance releases and updates. Each time the decision is made to include new enhancements in a maintenance release or update, it is an exception to our rule, done to keep Notes/Domino competitive in the marketplace and to meet customer needs and wants.

These lists can also be found in the set of release notes that comes with each new release. You can find all the **Notes/Domino Release Notes** in the Lotus Documentation on Lotus.com. You can also check on the **status** of the next MR/MU.

Release 5.0.1

Notes client
Updated viewers
Viewer capability was enhanced for Windows by providing the ability to view Office 2000 documents.

Keyboard access for embedded controls
In documents with embedded controls for such features as picking dates from your calendar in your Calendar view, you can navigate to an embedded control, give focus within the embedded control, and then remove the focus to continue navigating through the document.

Press the space bar to give focus to the embedded control (it is displayed with a thin black wire frame around it, which is removed when you press the space bar). Press Esc to remove focus within the embedded control (the thin black wire frame is redrawn around it) and to continue navigating through the document.

Domino Designer client
Usability
Several improvements and enhancements were made to Domino Designer to make it even easier to use. Key improvements were:
- Launch buttons for the Notes client, Domino Administrator, and Domino Global Workbench (DGW).
- Open in Designer option when performing a right-click on a task button (window tab) in the Notes client.
- The Open Database dialog box includes the ability to bookmark a database.
- A better message appears when saving a design element before using Preview in Web Browser.
- Double-clicking on a database opens the Database Properties box.

- The Bookmarks folder drop-down menu (upper-left button) now has "Create New Folder" as it does in the Notes client.
- Expanded size of the drop-down box in the Reference tab of the Programmer's pane.
- In the Borders combobox of a field infobox, added words for the "none" option to avoid confusion.
- Added a "Do not display this message again" checkbox to the "Can't Debug @Dialog Box ..." message.
- When adding a new shared image to an existing list, the list scrolls and the new addition is displayed as the selected item.
- When navigating from field to field in the Programming pane, Designer continues to display the same event the user initially selected rather than switching to the first populated event after each field change.
- In the Find dialog box of the IDE, Designer lists the last few values searched so they can be selected rather re-entered.
- The Formula Window dialog box is a resizable window.
- The default navigator pane displays only the preferred language rather than all available languages.
- Removed the Design menu option from the Designer Welcome page to avoid the accidental creation of design elements in bookmarks.nsf.
- In the Hotspot Button Properties box, provided width options of "Fit content" and "Fixed width."
- Allow forms, pages, and documents to have "system" as a background color option.

Java applets

The four Java applets (Editor, View, Outline, and Action Bar applets) are now compiled with JDK 1.1.6, which makes them smaller and faster.

The Editor applet can now support cut, copy, and paste of plain text from outside the applet. This applet will be signed with the Lotus Development certificate, so users will be prompted to trust the signer the first time they use it. The Editor gets its text from a hidden field on the page instead of passing in a URL. This also addresses a problem where entered text is lost when the page is refreshed, but may affect existing R5.0 applications.

The View applet adds SetDblClickTarget method in its API, so the frame target for the document can be set, for example, in the onLoad event of the form or page with the view.

The Outline applet now supports image wells.

Interpreting date/time field inputs

When a date field is formatted to expect month, day, and year, and only one of the three variables is entered, Notes will attempt to interpret what the other two entries are. If there is no month, then the default is the current month according to the operating system settings. If there is no day, the default is "01." If there is no year, the default is the current year. If an alphanumeric entry is made, Notes ignores the alphabetic characters and tries to determine the date based upon the numerals entered.

QuickStart tutorial

QuickStart is a hands-on tutorial that takes you through the steps of creating a Domino application. The \DATA\QUICKSTART directory contains the QuickStart Tutorial database as well as the files needed to create the sample Domino application. There's also a link to the QuickStart Tutorial on the Designer Welcome page. (QuickStart is only available on Windows platforms.)

Domino Enterprise Connection Services (DECS)

Enhancements added to DECS include Oracle Connector support for stored procedures, ERP connector support, Collapse/Expand and Order Metaconnector support, Support Pre-Open Formula, increased number of concurrent activities allowed, and a Reconnect on Dropped Connection option.

Lotus Connector LSX

Connection pooling support was added.

Button width options

The following four options were added when editing the width of a button on forms, pages, and documents:
- Maximum width
- Minimum width

- Fixed width
- Fit content

Domino Administrator
DUS option to add Administrator to mail file ACL
As part of the People and Groups Migration in the Domino Upgrade Services (DUS), two new options were added. The first option, called "Add administrator to mail file access control list," allows the administrator's name to be added to a new mail file's ACL with manager access. This gives the administrator the ability to migrate mail to the new mail file during the second phase of a two phase migration, where mail migration is done during the second phase. The second option, called "Overwrite existing passwords with random passwords," creates a random password for a migrated user, overwriting the migrated password for that user if one exists.

Enhanced Internet Address Tool
The Internet Address tool was enhanced to allow the administrator to select the Person documents that should have the Internet address set. When the administrator selects more than one Person document, and then invokes the Internet Address Tool, the tool indicates the number of users selected from which Domino Directory and sets/overwrites the Internet address for only the selected users.

Retaining cc:Mail MTA routing information for deferred mailbox migration
The migration tool provides an option that lets you migrate cc:Mail MTA users in two phases, rather than all at once. To use this option, complete the migration as follows:
- Phase 1: Register users from the existing Person documents created by the cc:Mail MTA and create Notes mail files.
- Phase 2: Migrate mail messages.

Generating passwords for users during migration
The 5.0.1 migration tools provided options for overwriting users' imported passwords with randomly generated passwords. In addition, the option "Generate random passwords" was changed to "Generate random passwords for users with no passwords."

Domino server
56-bit encryption supported
56-bit encryption (DES) was supported for international licenses of the Web server.

Transaction Logging
Features and improvements included:
- A new API to determine the state of a logged database or backup: STATUS LNPUBLIC NSFIsNewBackupNeeded.
- If transaction logging restart fails, new server console error messages appear that list dirty databases.
- During the first restart after disabling logging, restart recovery is run one final time to clean up databases.

Domino Server.Load
Domino Server.Load is a tool that measures and characterizes various Domino server capacity and response metrics. It allows you to select a workload and run it against a target server. The workloads (also called tests or scripts) simulate the behavior of Notes workstation-to-server operations.

Domino "Tivoli Ready"
Files included with the Domino server for Windows NT (Intel) make Domino "Tivoli Ready." You can manage your Domino server software under an integrated Tivoli management umbrella. This allows you to automatically discover, inventory, and monitor Domino servers with Tivoli Enterprise management products.

HTTP task always loads the Java Virtual Machin e
Beginning in 5.0.1, the HTTP task always loads the Java Virtual Machine (JVM) when the HTTP task is started. Previously, the JVM was not loaded if the "Java servlet support" setting in the Server document was set to None. This change has been made to fix a potential memory leakage problem running Java agents and servlets from Web browsers.

Management of DIIOP sessions enhanced

Beginning in 5.0.1, the parameter "Idle Session Timeout" on the Internet Protocols - IIOP tab of the Server document is used by the DIIOP task to determine the amount of time that a session can stay idle before it is forced to close by the server.

Additionally, the DIIOP task recognizes the following two new tell commands:

tell diiop show users
The DIIOP task reports the list of users connected to the DIIOP server.

tell diiop drop all
The DIIOP server drops all active connections. This command should be used sparingly because active sessions may be forced to discard unsaved data.

Directories

LDAP schema database

Domino automatically builds a database called Domino LDAP Schema (SCHEMA50.NSF) in the Domino data directory. This database provides information about the Domino LDAP schema attributes, object classes, and syntax. If you extend the directory schema, you can use the server command "tell ldap reloadschema" to update the schema in memory and then update SCHEMA50.NSF with your directory changes. If you don't use this command, these two updates are done automatically when the Designer task runs or when you quit and restart the LDAP service.

New directory catalog configuration options

There are additional options available under the "Group types" configuration field for a directory catalog. The options now available are:

- "Mail and Multi-purpose" (default) to include only these two types of groups from all the directories listed in the "Directories to include" field.
- "All" to include all types of groups from all the directories listed in the "Directories to include" field.
- "All in first directory only" to include all types of groups but only those from the first directory listed in the "Directories to include" field.
- "None" to exclude all groups.

Changing the name of the Users view in the Directory Catalog

You can now change the name of the Users view in a directory catalog as long as you keep the name Users as an alias.

LDAP search utility

The LDAP search utility (LDAPSEARCH.EXE) is now available on all supported platforms.

Changes to LDAP attribute searches

In 5.0.1, the LDAP service supports the certificate syntax, a kind of binary attribute. R5.0 supported userCertificate attributes if you used the syntax ;binary. 5.0.1 supports all certificate attributes, regardless of whether you specify ;binary.

LDAP searches of groups have changed

In Release 5.0.1, LDAP searches of all types of groups (except "Mail only" groups) are generally quicker because by default the LDAP service uses a view in the Domino Directory to search these groups rather than using full-text searching as it did in R5.0.

UTF-8 character encoding is used to return search results to LDAP V2 clients

In Release 5.0.1, the LDAP service by default uses UTF-8 character encoding when returning results using international characters to LDAP V2 clients, even though LDAP V2 RFC doesn't support the use of UTF-8. This has been done to be compatible with LDAP V2 clients that also use UTF-8 such as Netscape Communicator and EudoraPro 4.1.

Programmability
JavaScript
Notes/Domino now supports:
- window.open with height and width settings and opening in its own window.
- mouseOver and mouseOut events on images.

New class in lotus.domino package extends applet functions
The class NotesAppletContext was added to the lotus.domino package. Applets that extend AppletBase may get the NotesAppletContext to determine the source of the applet. Applets may use this class to write applets that work in the Notes client and in a Web browser.

Security
Importing Internet certificates from a Netscape browser
Internet certificates from a Netscape browser can now be imported to the Notes ID file. The certificates can be used for SSL client authentication and for encrypted and signed S/MIME messages. Certificates and keys that are compliant with Public Key Cryptographic Standard #12 (PKCS #12) in a version of the Netscape browser that is also PKCS #12 compliant can be imported to the Notes ID file if the browser is accessible to the local machine.

Dual key support of Internet certificates
If multiple Internet certificates are available in a Notes ID file, a user can specify one Internet certificate to use for encryption and another Internet certificate to use for signatures, instead of requiring that one certificate be used for both.

Templates
Reports
A new version of the Domino Messaging Reports template (REPORTS.NTF) was provided. A previous version of REPORTS.NTF was part of the R5 beta builds but did not ship officially in the R5 released code.

Release 5.0.2

Notes client
Contact Management via Webmail
Webmail users have the ability to do contact management. Webmail users can create contact and group information, which is stored in the user's mail file as address book documents.

Calendar enhancements
Two new print layouts were added, as well as support for various page sizes and types for users to select from when printing their calendars from Notes.

The new layouts are a trifold style print and a To Do List print. The trifold option enables users to print three separate panels on a page, either portrait or landscape. Users can select from the following options for the three panels on the page: Daily, Weekly, Monthly, To Do List, or a Notes section.

Users also have the option to print their calendars on the following page types and sizes: Franklin Day Planner Classic, Franklin Day Planner Monarch, Day-Timer Portable, Day-Timer Desk, Day-Timer Jotter, Day-Timer Folio, as well as 3x5 cards.

Notes now also supports alternate names for Calendar and Scheduling.

Importing Lotus Organizer GS into Notes
Lotus Organizer notepad and call entries can be migrated into Notes.

Enhanced import capability for Notes Rich Text
The Windows client provides the ability to import the following into a Notes Rich Text field using ANSI code page 1252:
- SmartSuite 97 and R9 files (1-2-3 and Word Pro)

- Microsoft Office 97 and 2000 files (Word, RTF, Excel)
- WordPerfect 7 and 8

Optimized memory utilization
Memory in the Notes client was further optimized in Release 5.0.2 by sharing memory pools among threads in NWEB.EXE, reducing instances of memory fragmentation, and allocating certain memory pools only when needed. On the Windows platforms, resource usage is further optimized by reducing the number of bitmap handles allocated from the GDI heap. The result is better coexistence with other applications.

Bookmark icon for Sametime
If the Sametime Connect client exists on a workstation, an icon in the Bookmark bar appears that allows you to launch Sametime Connect from within Notes.

Domino Designer client
Usability
The follow usability changes were made:
- When a user opens up a view in Design mode, the View Properties are opened if they are not already open, and the selection is placed on the first column in the view.
- A Launch panel has been added to the View Properties box to allow users to specify the frameset and frame that the view should be launched in when it is launched in a Web browser.

Image resources
The following changes to image resources were made:
- When creating an image well that contains more than one image for use on the Web, a new "Web browser compatible" checkbox is available.
- You can now select more than one image resource at a time to refresh or export.

New view property to set target frame
You can now specify a target frame for displaying a document when the user double-clicks it in a view. A single-click event can also be specified.

@RegQueryValue
A new query function, @RegQueryValue, provides the ability to query values from the Windows registry.

Right-to-left outlines
International users can now have their outlines displayed in the right-to-left fashion native to some languages.

Domino server
Performance monitoring statistics for Windows NT and Solaris
Domino will track performance metrics of the Windows NT (Intel) and Solaris (Sparc) operating systems and output the results to the server console. They can also be viewed from the Statistics & Events view via the Domino Administrator client.

Directories
LDAP schema checking enforcement
Release 5.0.2 allows you to enforce LDAP schema checking. If you enforce schema checking, the LDAP service only carries out LDAP add or modify operations if the information in the operations conform to the directory schema. Enforcing schema checking helps administrators control the content of the directory and helps lay the groundwork for future interoperability with other directories.

Additional LDAP schema enhancements
To better comply with LDAP standards, in Release 5.0.2 the LDAP service provides enhancements in areas such as street and postal Address attribute mapping, new mappings for LDAP name attributes, and changes to object class definitions, plus many LDAP schema changes.

Programmability
XML support via ?ReadViewEntries URL command

Release 5.0.2 adds support for a new URL command, ?ReadViewEntries, which returns view data in XML form.

Alternate name support for Registration classes
LotusScript NotesRegistration and Java Registration classes contain two new properties, AltOrgUnit and AltOrgUnitLang, which support the use of alternate names when creating ID files. In addition, altname and altnamelang parameters for the RegisterNewUser method have been added.

Java createSession allows local user lookup and password
NotesFactory.createSession(String host, String user, String passwd) is expanded to allow the creation of local sessions based on either the Notes user ID or (server installations only) a user lookup in the local Domino Directory.

Outline and OutlineEntry classes
Release 5.0.2 contains new and enhanced methods for the Outline and OutlineEntry classes for LotusScript and Java.

Agent.runOnServer method
The LotusScript and Java Agent.runOnServer method has been enhanced so that a client agent that invokes an agent to be run on the server may pass a NoteID to the server agent. The document represented by the NoteID may be used to pass input/output parameters between the client agent and the server agent.

Agent.run method
The LotusScript and Java Agent.runOnServer method has been enhanced so that a client agent that invokes another agent on the client may pass a NoteID to the invoked agent. The document represented by the NoteID may be used to pass input/output parameters between the two agents.

MIMEEntity
MIMEEntity is a new class that provides the ability to acquire the unconverted MIME content of Items of type MIME_PART. The MIMEEntity properties permit reading of MIME entity headers, reading of body content as text, and iteration through the individual body parts of a multipart MIME entity.

Security
Export Internet certificates
In Release 5.0.1 you could import Internet certificates into your User ID file. Beginning in Release 5.0.2, you can export Internet certificates from your User ID file into a file on your local machine, and then import them to use with a Netscape browser.

Changes in ECL permission defaults
The Execution Control List (ECL) entries for Default and No Signature were changed in 5.0.2. These entries now have no permissions checked.

The ECL dialog was also changed. You are no longer prompted to trust everybody in the organization of the user whose signature you are about to trust.

Templates
Directory Assistance template change
The Directory Assistance (DA50.NTF) template now creates a modifiable Group Expansion field in the Directory Assistance document. This enhancement allows administrators to control nested group searches in LDAP queries during Web authentication.

Mail template enabled with Sametime
Notes mail supports the ability to see if the sender and recipients of a mail message are on-line when you read that message. You can then have an instant message conversation with one or more of the on-line people who received the message. This feature is available if you have Sametime Connect installed and are using a Sametime 1.5 server in your organization.

Java Support

Beginning in Release 5.0.2, the Java Virtual Machine was upgraded to JDK 1.1.8 for Windows (Intel and Alpha).

Release 5.0.2b

Programmability
Component Object Model (COM) Support
With this support you can access the back-end Domino Objects through COM (for example, from Visual Basic or
VBScript) on machines with Domino server, Domino Designer, or Notes Release 5.0.2b or higher installed. The
Domino or Notes software does not have to be running. The COM interface is the same as the LotusScript
interface with some exceptions.

Release 5.0.3

Notes client
Calendar and Scheduling
The following Calendar and Scheduling changes were made:
- Printing for the following paper types: Day Runner Classic, Day Runner Entrepreneur, Day Runner Running
  Mate, A4 210 x 297 mm, A5 148 x 210 mm, B4 and B5.
- An option added in the calendar preferences allows users to disable the display of meeting documents in
  their inbox. This is for users who delegate control of their calendars to other people, and do not want
  meeting information appearing in the Manager's inbox.
- The Open Calendar feature is an option in the Calendar tools menu. Selecting this option opens a directory
  search dialog called "Open Calendar." The dialog enables users to individually open other people's
  calendars, if they have been given proper access.
- Users of 4.6 Notes client can now open a 5.0.3 (or higher) user's mail file, for such actions as Check
  Calendar or Group Calendar.
- When users print out the weekly view of their calendar, the date will be printed along with the day of the
  week. Example: Instead of just printing out "Tuesday" in the column head, "Tuesday - February 1" will
  appear.

Indic scripts support
The following scripts and locales are supported in Notes:

Scripts: Devanagari, Tamil
Locales: Hindi, Tamil, Marathi, Konkani

NNTP performance enhancement
NNTP replication performance has been improved so less time is spent pulling articles. The NNTPCL5.NTF
template is required to take advantage of the performance improvements.

Right-to-left view support
Views now support right-to-left display.

Enhanced HTML import
Enhancements were made in the importing of HTML file types resulting in better data fidelity, expanded list of
supported file formats, and better HTML rendering upon import.

Welcome page enhancements
The Welcome page has some minor cosmetic enhancements when opting to change your Welcome page.

Restore Bookmark defaults
If you inadvertently remove any of your default bookmarks (for example, Replicator, Designer, Workspace), you
can now retrieve them without deleting your BOOKMARK.NSF file. To do this, open one of your bookmark folders
(such as Databases or Favorites), select the drop-down arrow at the top of the frame, and select Restore
Bookmark Defaults. Also, new default bookmarks added to the template will be automatically added to the
user's set of bookmarks.

Domino Designer client
Domino Global Workbench
Domino Global Workbench was updated for the 5.0.3 release. New features include:
- Text in pages marked "Treat contents as HTML" is now tagged as HTML.
- JavaScript is supported.
- Build Options dialog box contains a new check box, "Disable LotusScript Recompilation."

Domino Administrator client
User's Internet address is not changed when registering users migrated from an LDIF file
When registering users migrated from an LDIF file, the domain name portion of the user's Internet address remains intact, that is, exactly as it was in the LDIF file. The administrator can change the user's Internet address by modifying the entry in the Internet address field. When registering users not migrated from an LDIF file, the Internet address is changed to reflect the default domain name as displayed in the Internet Domain field on the Basics pane of the User Registration dialog box.

Domino server
Additional IMAP client support
IMAP services on the Domino server have been enhanced to provide for wider support of IMAP clients, such as PINE, Eudora, Cyrusoft Mulberry, and Execmail 5.1 clients.

IMAP session limits
Domino administrators can now limit the number of sessions that the IMAP server will allow. A Notes.ini setting, IMAPMaxSessions, allows administrators to specify the maximum number of sessions that will be allowed in the IMAP server. If the parameter is not specified, or if the parameter is specified with a value of 0, then no limit will be enforced.

Passive tracking for CALs (client access licenses) and Notes/Domino Licenses
You can now select the license type "Lotus iNotes/Domino CAL" to get a total license count in the Server\License view of the Domino Directory. This was included in the R5 easy-to-use tool to assist our non-Notes, Web-based clients authorized to access a Domino server.

Directories
Authentication to LDAP servers
An option in an LDAP Directory Assistance document called "Optional Authentication Credential" enables a Domino server to present a name and password when connecting to an LDAP directory server. If you do not specify a name and password, the connection occurs anonymously.

Domino Enterprise Connection Services (DECS)
The following enhancements have been made to DECS:
- Added Linux support.
- Updated the ODBC Connector for compatibility with ODBC 3.5 and to allow access to Microsoft SQL Server 7 data sources.
- Added user-controlled subfield key ordering.
- Improved functionality for Domain Search and doclinks.
- The DECS Initialize Keys functionality has been modified to allow key fields of the NUMERIC data type.
- Stored Procedure browsing and selection from the Connection document.

Messaging
Allow multiple transfer threads to remote domains
A Notes.ini setting for the Domino server, RouterAllowConcurrentXFERToALL, provides the ability to allow multiple transfer threads to remote domains. Previously, multiple concurrent transfer threads were allowed to intranet domains only, primarily to prevent multiple threads from being allocated to one or more slow connections. This feature allows a simple override to this default behavior.

Router low-priority delay notification
Provides the ability to send the author of a low-priority message a custom e-mail that notifies the author that the

message will be sent during an off-peak time allocated for low-priority messages. This feature is useful for reminding people about company policy when sending low-priority messages and the potential for delay. Therefore, the author would be informed and not alarmed that the recipient had not yet received the mail message.

Restrict outbound Internet mail to specific domains or hostnames
Using fields in the Server Configuration document of the Domino Directory, the Router can now allow or deny delivery of messages to specific domains or hostnames.

Support multiple configurable relay hosts
This feature allows Domino administrators to specify that non-local Internet domains can be relayed to different relay hosts or to no relay host at all.

Programmability
LotusScript API - AgentLSTextFormat
This is a function that receives raw LotusScript code as input, and formats it so that it is understandable by the Notes IDE. This is to enhance the abilities of programmers to create agents through the C API and debug them using the IDE.

Java Classes for XML/XSL
Java classes and methods were added to provide services for the developer who needs to work with XML data. They include the industry-leading XML parser (XML4J) and XSL transform engine (LotusXSL), plus a new method to generate XML documents from native Domino documents.

Search
Search engine enhanced
Domino includes an alternate GTR search engine beginning in Release 5.0.3. This engine is not turned on by default. If you activate the new engine, Unicode support becomes available for searches. There are also improvements in search response time, particularly with large databases. This alternate engine is activated by placing the following setting in Notes.ini:

FT_LIBNAME=ftgtr34

Note that if you activate the alternate search engine using this .INI parameter, Domino re-builds the indices for all databases that are currently indexed. If the parameter is later removed from Notes.ini, all indices will again be rebuilt in their original R5 format.

Inxight Summarizer
The Inxight Summarizer is a feature for Domain Search on Windows NT that automatically pulls the best *n* sentences out of a document and displays them at search time as the document summary. This feature only works in conjunction with the alternate GTR search engine described above and using domain indexes.

Alternate filter for attachment indexing
An alternate filter was provided for attachment indexing that enhances the capabilities of the Keyview filter. The alternate filter provides support for file types, such as Ichitaro file format, which are important in international regions. The alternate filter is enabled by using the Notes.ini setting FT_ALTERNATE_FILTER=naltfltr.dll.

New option added for SearchView URL command
The URL command SearchView now supports a SearchOrder value of 4, which returns a resulting set of documents listed in the order in which they appear in the view being searched.

Templates
Mail template (MAIL50.NTF)
The action Expand Date Column was added to the Actions - Folders menu in the mail database. This allows users to widen the date column to accommodate 4-character years (such as 2000). Folders created pre-R5 template have columns that are too narrow.

Personal Journal template (JOURNAL5.NTF)
The Personal Journal template was upgraded to use R5 features such as outlines, framesets, and shared actions. It is also Web-enabled.

TeamRoom template (TEAMRM50.NTF)
The TeamRoom template provided a utility that migrates the design of the R4.x TeamRoom to the new 5.0+ design.

Lotus SmartSuite Library template (DOCLBS5.NTF)
Formerly found in the APPS directory of the Notes and Domino CD-ROMs, the SmartSuite Document Library template was incorporated into the installation process of Notes and Domino. The template has also been enhanced to use R5 features.

XML for Domino
DTDs
Two DTDs are documented in Domino 5.0.3 Designer Help and updated version of the print manual *Domino Designer Programming Guide, Volume 2* : Domino View DTD and Domino Document DTD.

Integrate the XML4J parser and LotusXSL transformation engine
The XML4J Parser and LotusXSL Processor were packaged with the product, and new methods were added to the Domino back-end objects so application developers can easily use them. The Designer and Server installation kits include both jar files.

Version Information:
XML4j 2.0.15
LotusXSL .0.19.1

Java applications and applets that use the remote Domino classes (that is, not agents) have to include XML4j.jar or XML4j.cab in their classpath to use the XML Parser. They also have to include LotusXSL.jar or LotusXSL.cab in their classpath to use the processor.

Release 5.0.4

Notes client
Calendaring and Scheduling
The chairperson of a meeting can add a room or change the location of a meeting and have it automatically send a reschedule notification to all invitees.

Internet Mail Address field's name tracking has been improved
Changes were made to the way the Internet Mail Address field is administered in Location documents.

Previously, on computers where users with separate IDs and Location documents shared a single physical machine and Notes client installation, switching user IDs could cause mail for a specified Internet user to be return-addressed for a different Notes Mail user on the same computer.

For example, when Person A sent Internet mail from their proper 'Person A' location, Person B on the same machine would receive all the replies to that e-mail.

The Notes Dynamic Configurator's automatic update of these user-specific fields was altered in 5.0.4. When switching user IDs, The Notes Dynamic Configurator would sometimes change the "Internet mail address" stored in the Location document. With this code change, the Configurator overwrites the address only if the address was previously set by the current user.

Directories
Directory Assistance
Directory assistance can now fail over to an alternate replica of a secondary directory without a server restart.

Directory Catalogs

Directory Catalogs support the use of selection formulas to use only a subset of documents from secondary directories. Server Directory Catalogs now support full functionality for R 4.6 clients.

LDAP

LDAP services were enhanced by providing support of more name formats for members of external LDAP directory groups, providing more flexibility in the storage of telephone numbers, returning the base entry on subtree searches, and LDAP recognition of group membership changes in a Domino Directory. Additional enhancements include the removal of case-sensitivity when searching the mail attribute as well as returning better results when doing wildcard searches on the mail attribute.

Java
JVM Upgrade in Domino for AIX and Linux

The Java Virtual Machine in Domino for AIX has been upgraded to 1.1.8-6 and the JVM in Domino for Linux has been upgraded to 1.1.8-2.

Remote access to Domino back-end objects from WebSphere

A jar file called NCSOW (Notes Client-side Objects for WebSphere) was provided that allows an IBM WebSphere application to access the resources of a Domino server that is on a separate machine using the Domino back-end objects. Previously, WebSphere could only access Domino resources if they were running on the same machine.

Programmability
Additional parameter for LotusScript OpenView method

The OpenView method of NotesUIDatabase has a fourth parameter called replaceView.

Security
Notes and Domino consolidated to a Global encryption

The Domino server, Notes client, Domino Administrator client, and Domino Designer client products have consolidated three encryption strengths—North American, International English, and French editions—into one strong encryption level resulting in a single "Global" release of the products. The Global release adopts the encryption characteristics previously known as North American. This change is a result of the relaxation of U.S. Government export restrictions that allows for export of strong encryption technology outside of North America. Therefore, the strong encryption in the Global products can be used worldwide, except in countries whose import laws prohibit it.

Server
Webmail performance improvements

The Domino server was enhanced to yield improved performance of Webmail on all platforms. Some enhancements have yielded further performance improvements on the Unix platforms.

Partitioning enhancements

Support was added for a new Notes.ini setting called PercentAvailSysResources. This parameter allows administrators to limit the amount of physical memory allocated to each partition on the server. It is also applicable to client partitions running on a Citrix MetaFrame server or Windows Terminal Server.

Release 5.0.5

Notes client
Calendar printing for international formats

Calendar and Scheduling printing now supports international formats and characters. For localized language versions of Notes, users can print calendars in the same format as they appear on screen.

Terra added as Welcome page option

The Welcome page for the Notes client now includes access to Terra, a Spanish-language news and entertainment portal.

User preference, "Show in-line MIME images as attachments"
A setting called "Show in-line MIME images as attachments" was added to the User Preferences dialog box, on the Basics tab under Additional Options. When this setting is checked, all multi-part/mixed in-line images display as attachment icons. When this option is not checked, multi-part/mixed in-line images are embedded in a Notes document. The setting corresponds to a Notes.ini setting called "ShowIMIMEImagesAsAttachments."

<u>**Domino server**</u>
Domino Network File Store
Domino Network File Store (DNFS) was added to the APPS directory on the 5.0.5 Domino CD. It provides the ability to use Domino as a file server. This provides Domino customers a secure, replicatable, and indexed collaborative repository for productivity files via standard Windows Networking. DNFS is a Domino server add-in task that enables users to read files from and save files to Domino databases from any Windows application. With DNFS, files stored in a Domino databases are presented to users in a traditional folder/file metaphor, and are accessed through an application's Open/Save dialog boxes, Windows Explorer, or any Windows file system dialog box.

DOLS 1.0.1 incorporated into Domino
Domino Off-Line Services (DOLS) 1.0.1 was incorporated into Domino as of 5.0.5. DOLS enables Web browser users to use Domino applications while disconnected from the network. These applications can be replicated later, either on-demand or on a scheduled basis. As of 5.0.5, DOLS 1.0.1 adds support for the OS/2, AIX, and Solaris server platforms.

iNotes Access for Microsoft Outlook
iNotes Access for Microsoft Outlook allows Microsoft Outlook users to access their mail, calendar, and scheduling information using a Domino server instead of Exchange. With iNotes Access for Outlook, organizations can take advantage of the Domino capabilities, such as reliability, scalability, and expanded platform coverage for their messaging infrastructure without changing clients. Additionally, as of 5.0.5, iNotes Access for Microsoft Outlook utilizes the Domino Off-Line Services (DOLS) technology to not only help in the delivery of the client code to the end users, but also to enable end users to access their mail while disconnected.

Webmail
Several new features were added to Webmail, including client performance improvements, off-line capability enablement, support for server-based Directory Catalogs, and overall user interface improvements. Highlights include:
- To improve client performance, the Outline and View Domino Java applets were removed and replaced with corresponding HTML-based elements. The implementation of the Rich Text editor applet was also changed. Creating a new mail message now generates a standard HTML field as the mail message body field, with an option for the user to switch to the Rich Text editor Java applet.
- Users can select multiple documents in an HTML view, something not possible with regular Domino HTML views. The new HTML view is used in place of the Java view applet (which until now was the only way users could select multiple documents from a view in a browser). HTML views load faster than Java applet views, improving Webmail performance.
- The mail component of Webmail was enabled for off-line use. This enablement was based on Domino Off-Line Services, using the MAIL50EX.NTF template. The Calendar and To Do sections of Webmail were not enabled for off-line use.
- In addition to the user's Personal Address Book and Domino Directories, server-based Directory Catalogs were added as a supported address directory type.
- User interface changes included improved alignment of the Action Bar Java applet, treatment of navigation folders, and other minor touch-ups throughout the product.

<u>**WebSphere and Domino integration**</u>
Single sign-on across Domino Web servers
A browser user can log on once to a Domino server, then access any other Domino server in the same domain without logging on again. This is accomplished with a "multi-server" option in the Server document for session-based authentication, along with a configuration document in the Domino Directory called the Web SSO document. Note that all Domino servers participating in multi-server session authentication must be at the

Domino 5.0.5 level or above, and users' browsers must have cookies enabled.

Single sign-on with WebSphere Application Server 3.5

A browser user can log on once to a Domino server, then access any WebSphere Application Server 3.5 without logging on again. This is accomplished by setting up the "multi-server" option for session-based authentication and importing the secret key from a WebSphere server rather than generating it in Domino. The WebSphere servers must be configured in secure mode and use WebSphere's LTPA (Lightweight Third-Party Authentication) protocols. The WebSphere servers may use the Domino Directory as the repository for user definitions and passwords or certificates, via Domino's LDAP service. Note that all servers participating in a single sign-on domain must be at the Domino 5.0.5 and/or WebSphere Application Server 3.5 level.

New Java API options for authenticated invocation

New options in the Notes APIs for Java allow sessions between Domino servers, or calls between Domino and WebSphere 3.5 Java code, to carry a user's authenticated identity. The servers must be set up to utilize the "single sign-on" features introduced in Domino 5.0.5 and WebSphere 3.5.

Administration

Administration Process now supports updates to Private Design Elements

Notes and Domino supports the renaming of private design elements in Administration Process rename user requests. Before this enhancement, the rename user request was unable to rename private design elements and sign them. Now, the server builds the list of design elements when the user authenticates and signs the elements after the rename has taken place.

Directories

Support added for LDAP search references

Prior to 5.0.5, the Notes client was unable to correctly handle LDAP search references, which are more correctly known as LDAP Continuation References as defined in RFC 2251 Paragraph 4.5.3. Starting in Release 5.0.5, the Notes client was enhanced to correctly process these returns (which contain a mix of search results from the responding directory and referrals to other directories that may contain additional results).

Extended Directory Catalog

The Extended Directory Catalog combines advantages of the Domino Directory and the standard Directory Catalog by aggregating entries from multiple Domino directories into a single directory database. This is similar to the construction of a standard Directory Catalog but retains the full set of indexed views and other features of the Domino directory. This enables the enterprise to maintain a single consolidated server-based directory structure that responds rapidly to a variety of search patterns and can contribute to enhanced mail router performance.

Programmability

TrimTrailingSpaces property added for ODBCResultSet

The ODBCResultSet property TrimTrailingSpaces indicates whether trailing spaces are trimmed from character values upon retrieval.

AddressBooks property of NotesSession now returns directory catalogs

As of 5.0.5, the AddressBooks property of NotesSession returns directory catalogs. The (already available) IsDirectoryCatalog property of NotesDatabase is True for a database retrieved through AddressBooks if it is a directory catalog and False if it is not. The database must be explicitly opened to see this property. This property always is False for a database retrieved through a means other than AddressBooks.

Search

New GTR search engine now on by default

In 5.0.3 and 5.0.4, Lotus included with Notes and Domino a new search engine designated GTR-34 (in addition to the engine that originally shipped with Notes and Domino R5). The GTR-34 engine was not turned on by default in these releases, however.

Beginning in 5.0.5, the newer GTR-34 engine has become the default search engine. It is automatically turned on when you upgrade to 5.0.5. Using the new GTR-34 engine, Unicode support becomes available for all

searches. You will also see significant improvements in search response time. GTR-34 reduces the size of indices up to a factor of 5. It also delivers query lookup performance that is significantly faster than the original engine.

Note that Domino will re-build indices for all databases that are currently indexed, unless your administrators already activated the GTR-34 engine and allowed it to rebuild all indices when GTR-34 was first released in 5.0.3/5.0.4. Domino will rebuild indices on both the 5.0.5 server and on Notes client machines that access the 5.0.5 server.

The original search engine can be retained by placing the following setting in Notes.ini.

FT_LIBNAME = ftgtr

The setting must be present on any client or server where you want to retain the old search engine and prevent the rebuilding of indices.

Security
Workstation ECL refresh button
The Workstation Security: Execution Control List dialog box has been updated to include a Refresh button that automatically updates the workstation ECL with settings from the Administration ECL on the user's home server. You can use the new Refresh button in place of the previous method that required administrators to create a button with a formula and insert it in a mail message to roll out updated ECLs to users' workstations.
Templates
By Author view in TeamRoom template
The TeamRoom template includes a By Author view, so that participants can view all documents categorized by author.

Templates enabled for DOLS
Domino Off-Line Services (DOLS) provides a way for browser users to utilize Domino Web applications off-line. Using a browser, the user can take a Domino application off-line, make changes, and synchronize those changes with the on-line version. Beginning in 5.0.5, Webmail (MAIL50EX.NTF, extended mail template) and the Web Discussion templates are enabled to work with DOLS.

Release 5.0.6

iNotes Access for Microsoft Outlook
Password management and mail delegation options for iNotes Access for Microsoft Outlook users
Accessed through the Outlook properties panel, a new properties panel has been added that will allow iNotes users to change their passwords, delegate access to their mail files, and easily configure an Outlook profile to access a mail file that has been delegated to them. Prior to 5.0.6, Administrator intervention was required to change user passwords and/or to set up mail delegation for iNotes Access for Microsoft Outlook users.

Messaging
SMTP exceptions to authenticated hosts
With 5.0.6, a new feature has been added that allows the existence of an exception list. This list consists of hosts and/or IP addresses that are not mandated to authenticate when SMTP authentication is required (that is, when Anonymous SMTP Access is turned off). This feature is enabled via a new Notes.ini parameter, SMTPAllowConnectionsAnonymous=1. Prior to this release, authentication was required when Anonymous SMTP Access was turned off in the Server document.

By adding the new Notes.ini variable, particular hosts or TCP/IP addresses (for example, Domino Servers or sub-nets) can be excluded from the authentication requirement.

Release 5.0.7

Full-text search

Ichitaro file format support
Full-text search now supports attachments in the Ichitaro file format.

iNotes Access for Microsoft Outlook
Language selection options for iNotes Access for Microsoft Outlook
iNotes Access for Microsoft Outlook now allows Microsoft Outlook users to install the preferred language files directly from the download page. Prior to 5.0.7, the language selected in your operating system's regional settings were always installed by default, and other language options were not configurable from the download page.

Java
JVM upgrade in Domino for OS/2
The Java Virtual Machine in Domino for OS/2 has been upgraded to 1.1.8.

Domino Off-Line Services
Cross-certificate support for DOLS synchronization
The iNotes Sync Manager now automatically copies and configures an off-line cross certificate from the host server (if available) when the synchronization ID is certified with a public key that differs from the host server's.

Release 5.0.8

Upgrade by Mail
Enhanced upgrade by Mail for 5.0x to Release 6 upgrade
The enhanced upgrade-by-mail feature provides a wizard-like interface that allows Domino administrators to create and mail a customized upgrade message to Notes users. Administrators can decide whether recipients can upgrade their Notes client code by clicking a single button in the memo or by running setup automatically upon opening a memo.

Administration
Ability for administrators to create new replicas of mail files
A new feature allows administrators to create and move database replicas regardless of whether or not they have access to the database. Administrators can create a replica without having to open the database and obtain the replica ID. The three administration process requests—Check Access for Create Replica, Check Access for Move Replica, and Check Access for Non-cluster Replica Move—that formerly checked for the replica ID no longer do so.

The primary benefits derived from this new feature are ease of administration for load-leveling applications and more consistent delegation of administration duties. Application load leveling is smoother because administrators can easily move applications from overloaded servers to less utilized servers. Delegation of duties becomes more consistent because administrators alone can move applications to other servers, leaving application designers to concentrate on designing.

DOLS
CD Level 1 support (pre-pack of DOLS file sets and application replicas)
The DOLS client CD can be configured to pre-pack application replicas.

iNotes Web Access
New iNotes Web Access feature
iNotes Web Access is a next-generation Web client that delivers leading Domino messaging, collaboration, and PIM (Personal Information Management) capabilities to Web browsers. For the first time, browser users will be able to take full advantage of Domino services through an intuitive, easy-to-use interface—both on-line and off-line.
iNotes Web Access offers:
- *A leading-edge Web client*
  iNotes Web Access combines the simplicity and universality of a Web browser with the power of an enterprise-class, full-featured application.
- *All the advantages of Domino*

Extend your enterprise or e-business by delivering Domino to customers, business partners, and end users through a sophisticated Web client.

- *On-line and off-line access*
  For the first time, give Web browser users access to e-mail, calendar, group scheduling, to do list, and personal contacts—whether they're on-line or disconnected.
- *Rapid, no-touch deployment*
  Instantly deliver Domino collaborative services to all your browser users.
- *Instant messaging and collaboration*
  iNotes Web Access integrates with Lotus Sametime and DOLS, letting browser users see who's on-line, send instant messages, chat with colleagues in realtime, and collaborate over the Web.

Note: The 5.0.7a to 5.0.8 Incremental Installer files here on Notes.net do not include the iNotes Web Access code. This notice, **Where is iNotes Web Access?**, explains how to get this feature.

Release 5.0.9

DECS
Lotus Connector for DB2 2.0
Release 5.0.9 includes the Lotus Connector for DB2 2.0. This version has the following features:
- It is certified for use with DB2 UDB version 6.x and 7.1.
- It has the ability to handle output parameters from stored procedures.
- It includes support for BIGINT and XML data type, support for scrollable cursors in LotusScript and LC Java, and improved response time for operations involving the DB2 timestamp feature.

For more information, please see the **Lotus Connectors and Connectivity Guide** for LEI 3.2, which contains the Lotus Connector for DB2 version 2.0 information.

DOLS
DOLS Compact/Full Text Search Configuration Settings
DOLS Compact/Full Text Search Configuration Setting allows administrators to turn on and off the database compaction and full-text search indexing process of their users from within the DOLS configuration form. The default setting will remain "On" as this has been the past behavior. These processes currently occur during the DOLS synchronization process.

DOLS local encryption support
Local encryption of databases within downloaded subscriptions to a DOLS client machine is now supported through new settings within the DOLS configuration document.

Off-line Directory Catalog support
Off-line Directory Catalogs can be utilized for DOLS-enabled applications for such thing as directory lookups and addressing. The feature is available through a new settings within the DOLS configuration document.

Domino Upgrade Services (DUS)
The Exchange DUS now includes a "convert mail only" option that allows the DUS to write to an existing Notes mail file, rather than creating a new mail file.

iNotes Web Access
Full alternative name support for iNotes Web Access
iNotes Web Access has been enhanced to fully support alternative names, just as Notes/Domino provides ability to set 'Alternate Name' for Notes users in Notes/Domino R5. This ability enables users to use alternate representation as their user names in their native language other than the ordinary Domino primary user name to display user names.

Name resolution when sending mail
This allows an iNotes Web Access end-user to check the names of recipients of an e-mail for accuracy before sending. This feature prevents mail from being misdirected or not received because the recipient's name was misspelled. This provides the similar type of functionality that Notes users have with the type-ahead feature in

memo addressing.

Roll back to the HTML file upload/download control if ActiveX controls are not permitted
Some companies restrict the use of ActiveX controls by users for security purposes. iNotes Web Access leverages an ActiveX control for the file upload/download control. This new feature will allow for the "roll back" to a non-ActiveX control that will still provide users the ability to upload or download file attachments. It won't provide some of the drag and drop capabilities that the ActiveX control does, but the basic feature will now be available to users who can't use ActiveX controls.

Support for personal group names
iNotes Web Access has added the ability for users to create and manage personal groups, similar to the personal groups in the Notes client Personal Address Book. These personal groups are stored in the user's mail file and can be used for all mail and C&S features.

iNotes Access for Microsoft Outlook
Local database encryption support
Users can now set local encryption of a mail database within the download page.

Off-line Directory Catalog support
Users can now use a company address book (Domino Directory Catalog) while off-line.

Security
Support for Domino to issue Single Sign-on cookies when authenticating a user name via a DSAPI filter
In R5.0.9, the Single Sign On feature introduced in R5.0.5 has been enhanced to support user authentication using a DSAPI filter. After the DSAPI filter authenticates the user, the Domino server will issue a session token for the user if multi-server session authentication is enabled on the server. For more details on configuring your Domino web server for single sign on, please refer to the release note titled "Enabling Single Sign-on for Domino and WebSphere servers" in the **5.0.9 Release Notes**.

Notes URL Support
The Notes URL (notes://) allows a Web page developer to add links to Notes documents, views, and databases into a web page. This functionality allows a web browser user to launch a Notes URL like it was a Notes document link, view link, or database link. When a browser user clicks on a Notes URL link, it will launch the Notes client (if it wasn't already running) and will open the appropriate document, view, or database. The feature is already available as of Notes 5.0 but the Notes install program did not add the entry in the Windows Registry for the notes protocol handler. In release 5.0.9, the Notes client installer automatically adds the Notes protocol handler information to the Registry.

Release 5.0.10

Client
Windows XP Professional supported for Client
Beginning in Release 5.0.10, Lotus Notes adds support for the new Windows XP platform. It is important to note that this support is for the XP Professional only.

Systematic replicating by NotesMinder when a mail replica is local and the Notes client is not active
In R5.0.10, NotesMinder will use the server mail replica to replicate with the local mail file, using the polling interval defined in the NotesMinder Preferences dialog box.This will be done only when all of the following conditions occur:
- The operating system is MS Windows.
- The Notes client is not currently running.
- The active Location document is set to use a local mail file.

This feature uses the time-tested Notes client DLL to replicate and is incorporated into the failover code of NotesMinder for reliability.

If the current Location document uses a local mail file and the Notes client is not running, NotesMinder will

replicate in one direction, from the server to the local file, with the server replica designated in the personal location. The user will not have to manually replicate to see the new mail on their client system.

NotesMinder will do its polling systematically on the server mail replica, thus bypassing whatever is referenced as MailFile in the Notes.ini or personal Location document.

With this feature, the user no longer needs to agree to have polling done on the server replica and to replicate manually to see the mail arrive in the local mail database. This is also true if the user wants to look at the header of the messages; the user would always look at header of messages on the server replica.

Client - International
GB18030 support
Release 5.0.10 supports GB18030-2000 (the new Chinese character set) for the first phase of the Chinese Government conformance requirements, which includes the characters in CJK Unified Ideographs Extension A and four scripts (Uygur, Tibetan, Mongolian, and Yi). Characters in CJK Unified Ideographs Extension B are *not* supported in this release. Please contact operating system venders to verify which versions or patches support GB18030. The supporting levels of the new characters could differ by function.

All - Install
The install screen contains version number
Customers installing Release 5.0.10 can now see the release number of the version that they are installing. The version number appears in the title bar of the installation screen.

Release 5.0.11

Client
Microsoft Office XP support
Lotus Notes 5.0.11 supports Microsoft Office XP.

Release 5.0.12

Client/Server
Mozilla Web browser support
Beginning with Release 5.0.12, the Mozilla Web browser is now supported on both the IBM OS/2 and Linux platforms.

Client
Calendar and scheduling
The repeating meetings functionality has been improved for better interoperability between Notes 5 and Notes 6 clients.

DECS
Microsoft SQL 2000 and Access 2000 support
Native connectivity through the Lotus Connector for OLE-DB is available for Microsoft SQL 2000 and Microsoft Access 2000 on both the Windows NT and 2000 platforms. And you can use the connector with the Lotus Connector LSX.

DOLS
Support for multi-server single sign-on and DSAPI environments
Users can install and configure DOLS subscriptions for offline use in multi-server single sign-on (SSO) and DSAPI external authentication environments.

Subscription download support for reverse proxy configurations
You can download and install DOLS subscriptions in reverse proxy configurations.

Support for dual TCP/IP addresses for NRPC connections

You can configure a DOLS server to support dual TCP/IP addresses used to connect to Notes RPC (NRPC).

Platforms
Citrix MetaFrame XPe FR2 platform support
Beginning with R5.0.12, the Notes client is supported on Citrix MetaFrame XPe FR2 on Windows 2000 server using NT and MAC ICA(Independent Computing Architecture) clients. The Citrix ICA client separates an application's logic so that the server processes the user's commands, but the client shows only screen updates. Note that if you allow more than 10 concurrent Notes users on the server, server performance degrades.