



Coexistence Manager for Notes Version 3.6

Release Notes

July 2014

Document ID 206

These release notes provide information about the Dell™ Coexistence Manager for Notes 3.6 release.

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About Coexistence Manager for Notes 3.6

Coexistence Manager for Notes (CMN) provides rich directory, email, calendar and free/busy coexistence features between a Lotus Notes/Domino environment and Microsoft Exchange—both on-premises servers and hosted Exchange environments like Office 365. CMN can be deployed either for a finite transition period, as when migrating from Notes to Exchange, or for indefinite or even permanent coexistence.

CMN version 3.6 is a minor release, with enhanced features and functionality. See [New features](#) and [Enhancements](#).

With this release, the CMN product has been rebranded to the Dell brand. While product components and features remain essentially the same, the program screens and product documentation now have a new appearance to represent Dell Inc.

New features

New features in CMN 3.6:

- **Domino 9.0.1 and Notes 9.0.1 support:** All CMN components now support Domino server version 9.0.1, and its corresponding Notes 9.0.1 client.
- **Notes/Domino 8.5.3 FP5 and FP6 support:** CMN now supports Notes/Domino 8.5.3 FP1-FP6. Earlier CMN releases had not supported FP5 or FP6 because those versions performed MIME conversions differently.
- **Exchange 2010 SP3 support:** All CMN components now support Exchange 2010 SP3.
- **Exchange 2013 SP1 support:** All CMN components now support Exchange 2013 SP1.
- **Windows Server 2012 R2 support:** All CMN components now support Windows Server 2012 R2.
- **iPhone iOS 7 support:** CMN now processes Notes-to-Exchange messages so they are compatible with Apple's iPhone iOS7.
- **PowerGUI 3.8:** The Dell PowerGUI bundled with CMN has been upgraded to PowerGUI 3.8. PowerGUI is an extensible graphical administrative IDE for managing systems based on Windows PowerShell.
- **Log Viewer 2.0:** The Dell Log Viewer utility that accompanies CMN has been upgraded to version 2.0 in this release. The updated CMN *User Guide* (see the *Log Viewer* chapter) describes this new version.
- **EWS Managed API 2.1:** CMN now uses version 2.1 of EWS Managed API for better compatibility with Exchange Online.
- **Online search of Dell resources:** The Management Console for all CMN components now offers an online search feature that opens a browser window to Dell's online product information resources. The feature automatically relays a relevant keyword search string to the URL and finds pertinent information in Dell's online documentation. An online search is activated by clicking the magnifying-glass icon in the masthead of any Dell program screen. The CMN *User Guide* provides more information about how to use this feature.
- **Directory Connector "dry runs":** The Directory Connector now permits a "dry run" of a connector, in which the potential outcome is documented in the log file, but nothing is committed to the target. This feature lets you examine a connector's outcome and perhaps fine-tune its configuration before finalizing the run. The feature is enabled by a checkbox ([] **Do not commit changes**) on the DC's *Connector Settings* screen.
- **Easy restoration of Directory Connector default attribute associations:** Default attribute associations in the Directory Connector can now be easily restored to their default values. In the attribute-mapping screens of a connector's *Advanced Settings*, attribute associations that have been changed from their defaults now appear highlighted with a gray bar in the table. To restore a default mapping that has been changed:
 - Right-click the highlighted line to open a confirmation prompt ("*Replace with default value?*"), and click **Yes** to confirm your command (or click **No** to cancel it).

Attribute associations that have been **Removed** do not appear in the table. To restore a default mapping that was previously **Removed**:

- Click the **Defaults** button to open a dialog box showing the default attribute associations (if any) that have been **Removed**. In the *Defaults* dialog box, select (click on) the line you want to restore, and click **OK**.

In either case, remember that multi-valued attributes in the source can appear two or more times in the table—once for each value assigned in the target—so be careful when selecting the correct line to restore.

- **Configurable cleanup of SQL execution histories:** The Directory Connector can now be configured to delete the contents of its SQL connector-execution histories at regular intervals. This feature is controlled by parameters in the Directory Connector's *configuration.xml* file:

```
<SqlStatusRetainDays>2</SqlStatusRetainDays>
<SqlStatusCleanupHour>23</SqlStatusCleanupHour>
<SqlStatusCleanupMinute>59</SqlStatusCleanupMinute>
```

The values in this example tell the DC to empty the history log file every other day (*SqlStatusRetainDays=2*) at 11:59pm local time (*SqlStatusCleanupHour=23, SqlStatusCleanupMinute=59*). By default:

```
<SqlStatusRetainDays>0</SqlStatusRetainDays>
<SqlStatusCleanupHour>0</SqlStatusCleanupHour>
<SqlStatusCleanupMinute>0</SqlStatusCleanupMinute>
```

... the DC will delete everything at midnight each day. These parameters usually appear at or near the end of the *configuration.xml* file, typically between *<SvcPassword>* and *<LogAccepterPort>*.

See also:

- [Enhancements](#)
- [Resolved issues](#)

Enhancements

The following enhancements are implemented in CMN 3.6.

Directory Connector enhancements

Enhancement	Issue ID
<p>Multi-domain forest support in Directory Connector: CMN's Directory Connector now supports access by a single connector to multiple domains in an AD forest. Four screens in the Connector Creation Wizard have been updated in support of multi-domain forests:</p> <ul style="list-style-type: none"> • E-to-N connector, <i>Source Server Information</i> screen: A set of three radio buttons has been added to the right of the Domain field: <ul style="list-style-type: none"> <input type="radio"/> Domain Controller <input type="radio"/> Domain <input type="radio"/> Forest <p>Select the Forest option if you want this connector to access multiple domains in a source AD forest.</p> • E-to-N connector, <i>Source Object Selection</i> screen: In the Source OU container subtrees display, each subdomain and adjacent domain now appear with their own checkboxes, and must be explicitly selected to be included with this connector's source OUs. <i>Selecting a higher-level OU does not include all of its lower-level OUs.</i> • N-to-E connector, <i>Target Domain Information</i> screen (previously <i>Target Server Information</i> screen): A set of three radio buttons has been added to the right of the Domain field: <ul style="list-style-type: none"> <input type="radio"/> Domain Controller <input type="radio"/> Domain <input type="radio"/> Forest <p>Select the Forest option if you want to select (in the next screen) a Target OU from among multiple domains in a target AD forest.</p> • N-to-E connector, <i>Target Location Information</i> screen: The Browse button associated with the Target Search Base DN field now opens a pop-up list of available target base DNs, with checkboxes, so you can select one or more. If you want to include users in the sync process, to check for existing objects in multiple target domains, each target base DN must be explicitly selected to be included in the comparisons. <i>Selecting a higher-level OU does not include all of its lower-level OUs.</i> <p>The CMN <i>User Guide</i> has been updated to include this information in the field notes for these screens.</p>	<p>329528 327235</p>

Directory Connector performance enhancement in migration scenarios: In migration scenarios where directory updates proceed at regular intervals throughout the transition period, the Directory Connector re-compares the source and target objects at every update to determine which objects should be provisioned or updated. This process takes longer as more users are migrated, simply because the list of migrated objects to compare grows larger with each new migrated batch. The comparison methods have now been refined to yield improved performance in these scenarios.

Free/Busy Connector enhancements

Enhancement	Issue ID
<p>Alternate web service prefix for Notes F/B Connector: The Free/Busy Management Console now permits designation of an alternate web service prefix (other than <i>autodiscover</i>) for the Notes Free/Busy Connector. This accommodates F/B coexistence with Exchange 2013 or Office 365, where the prefix is configurable. The <i>Dell Web Services</i> screen (in CMN's F/B Management Console) now contains a Web Service Prefix field, which is set to <i>autodiscover</i> by default. The prefix value can be changed, if necessary, to facilitate F/B coexistence with the later Exchange versions.</p>	321250
<p>LWPSCHEDGATEWAY monitoring option: The <i>qcalcon</i> component of CMN's Free/Busy Connector can now be configured to not monitor the <i>LWPSCHEDGATEWAY</i> queue, which can improve performance in some environments. The option is set by a new checkbox on the <i>Qcalcon Settings</i> screen of the Free/Busy Connector Management Console:</p> <p style="padding-left: 40px;"><input checked="" type="checkbox"/> Monitor LWPSCHEDGATEWAY queue</p> <p>The option is enabled by default (checkbox is marked, so <i>qcalcon</i> <i>does</i> monitor <i>LWPSCHEDGATEWAY</i>). Note that the <i>qcalcon</i> task must be restarted for a change to this checkbox to take effect.</p> <p>The checkbox also corresponds to a new boolean parameter in the <i>QCALCON.EXE.Config</i> configuration file (typically in <i>C:\Program Files\IBM\Lotus\Domino</i> on the Domino server):</p> <pre style="padding-left: 40px;"> <configuration> <appSettings> ... <add key="MonitorLwpSchedGatewayQueue" value="False" /> </appSettings> ... </pre> <p>Again, the option is enabled (<i>True</i>) by default, and the <i>qcalcon</i> task must be restarted for a change to this parameter value to take effect.</p>	360022

Mail Connector enhancements

Enhancement	Issue ID
<p>Option to control interpretation of "primary" HTML body of calendar message: A new boolean program parameter lets you configure how the Mail Connector will interpret the "primary" HTML body of a calendar message. In the <i><root></i> node of the Mail Connector's <i>Configuration.xml</i> file:</p> <pre style="padding-left: 40px;"> <infercalendardescriptionfromhtml>false</infercalendardescriptionfromhtml> </pre> <p>... determines whether CMN will interpret the "primary" HTML body of a calendar message as a rich-text version of the calendar description. The default is <i>True</i>, since Notes natively emits calendar messages with the rich-text version of the body in the HTML body. But the <i>False</i> option can be useful where a custom Notes application emits calendar messages with a blank HTML body, and a description in the calendar body.</p>	349185
<p>Resources address rewriting: To specify an address for a Domino resource that is different from what Exchange is emitting, use the CMN Management Console to specify the new address in the resource mapping section.</p>	343068

Resolved issues

The following is a list of issues addressed in this release.

Directory Connector resolved issues

Resolved issue	Issue ID
Improved handling of contact provisioning in AD.	361790
An N-to-E connector running in <i>Update</i> mode now compares a user's <i>Notes Internet Address</i> to the primary SMTP address in AD to prevent multiple SMTP address values in AD. Since the connector's internal mapping script now merges AD values with Notes values, the <i>AppendAttributes</i> feature is no longer necessary for proxy addresses. (The <i>AppendAttributes</i> parameter lets you specify a list of one or more target attributes whose values will be appended to, rather than replaced by, a connector running in <i>Update</i> mode.)	338957
The PowerShell script used to populate the Notes <i>UID</i> is now applied in a connector's <i>Provision</i> mode as well as in <i>Update</i> mode.	337309

Mail Connector resolved issues

Resolved issue	Issue ID
Improved handling of scenarios where a Notes meeting organizer cancels " <i>this and all previous</i> " or " <i>this and all future</i> " instances of a recurring meeting.	347584
Improved handling of message attachments and body text when the Mail Connector is configured for address rewriting (by the <i><rewriteinternetdomains></i> parameter).	339447
Improved flexibility in connecting to Domino using a non-standard LDAP port.	336726
The <i>MailServer</i> attribute has been removed from the default attribute mappings for an E-to-N connector, to prevent updates to the <i>MailServer</i> attribute.	332749
Enhanced fidelity of Notes all-day event start and end times when migrating to Exchange 2013 and Office 365.	330175
Enhanced HTML body handling for messages with <i>.ICS</i> attachments from external sites so all elements of the message appear within the mail client.	327904
Improved handling of MIME content in certain types of forwarded messages.	326719
The Directory Connector's Load from AD feature (button on N-to-E <i>Target Location Information</i> screen) can now be used from an untrusted domain. This feature tells CMN to search Active Directory for certain selected values, return them (in a popup dialog box), and let you choose which value(s) you want to insert into the screen.	325143 288607
Better handling of the " <i>Request More Information</i> " feature when requested by a Notes invitee to a meeting organized by an Outlook user.	323518
The Mail Connector now processes Notes-to-Exchange messages so that a message containing text, an embedded image and an attachment will appear in iOS with all those elements intact.	322373
The Mail Connector skips MX lookups when <i>Inbound/Outbound</i> servers are specified by IP address.	314415
Improved attachment preservation when sending mail to Exchange 2013 recipients.	313289
The Mail Connector's address-rewriting feature no longer strips the quoted portions of user address display names.	310377
The Mail Connector preserves the body in Outlook for a counter-proposal sent by a Notes invitee to an Outlook organizer.	309894 309885
The Directory Connector no longer sets the AD <i>targetAddress</i> during a "Notes remove forwarding" operation with Office 365.	308081
In a DC connector, a name rule with format <i><last name><first initial></i> now syncs correctly.	307522

Improved reliability of Directory Connector OU searches in a Domino source.	297775
Preservation of header encoding data for messages with non-standard Content-Transfer-Encoding.	290138
A DC N-to-E connector again checks against the Notes source to see whether objects are available for sync. This was DC behavior in earlier CMN releases, but the function was disabled when the underlying DC engine was replaced in version 3.5, but this functionality is now restored.	282368
When a DC connector encounters duplicate object names in a source directory, it now accepts the first but ignores the second, to prevent generating duplicate objects in the target. The connector also logs the duplicates and continues processing rather than stopping when it encounters duplicates.	272437 271661
Preservation of return addresses on " <i>Request Information</i> " emails sent to Exchange/Outlook meeting organizers from Notes invitees.	235399

Free/Busy Connector resolved issues

Resolved issue	Issue ID
Better logging and improved validation of time zone information for free/busy lookups in some environments.	322324
The <i>autodiscover</i> web service logging has been expanded to capture additional information on incoming requests.	321716
Improved handling of <i>QCalCon</i> API calls in some environments, with better logging of associated F/B Connector activity.	313150
The Free/Busy Management Console now permits designation of an alternate web service prefix (other than <i>autodiscover</i>) for the Domino Free/Busy Connector component. This accommodates F/B coexistence with Exchange 2013 or Office 365 where the prefix is configurable. The <i>Dell Web Services</i> screen (in CMN's F/B Management Console) now contains a Web Service Prefix field, which is set to <i>autodiscover</i> by default. The prefix value can be changed, if necessary, to facilitate F/B coexistence with the later Exchange versions.	309048
The F/B installer now generates a link in the F/B folder to open PowerShell with preconfigured commands that facilitate configuration of the F/B <i>QCalCon</i> task.	359741
Changes to SMTP domain mappings entered by the F/B Management Console are saved as part of the F/B Connector configuration. Dell testing was unable to reproduce a reported issue with this functionality.	320640
Improved PowerShell cmdlet to set F/B SMTP domain mappings: <i>Set-CMNDominoFreeBusyConfig -SMTPDomainMappings "Notes.test=Test.com"</i>	320625

Known issues

The following is a list of issues, including those attributed to third-party products, known to exist at the time of release.

General known issues

Known issue	Issue ID
Localization of CMN for other locales and languages is not yet available. The screens and documentation in the current release are English only.	

Directory Connector known issues

Known issue	Issue ID
A connector configured within the Directory Connector to sync room resources from Notes to Exchange will automatically include mail-in databases as well. Some organizations may prefer to exclude mail-in databases or handle them through a separate connector, so a future CMN release will offer a separate configuration checkbox for mail-in databases. In the meantime, an object filter (defined in a Connector's <i>Advanced Settings</i>) can accomplish the same outcome.	267468
After enabling the <i>Add</i> and <i>Delete Verification</i> features at particularly low limits (e.g., <i>Add</i> limit at 50 and <i>Delete</i> limit at 5), in some environments and scenarios a DC connector may run inordinately long without displaying either an error message or any "in-process" indication, while CMN reports the connector status as <i>Running</i> .	258858
SMTP addresses that contain a space within a quoted string, such as " <i>Wilbur Jones</i> @domain.com, are not supported in this release of the Directory Connector. The addresses must be corrected (remove the space).	140661
The Directory Connector creates a folder for each defined Connector (under ...\ <i>Directory Connector</i> \Tools\ <i>Connections</i>) to store Connector-specific information. The <i>Remove</i> feature does not remove this corresponding Connector folder.	139586
When configuring the synchronization service and the SQL connection the first time after a new installation, an error may be displayed when clicking Set Configuration on the Directory Connector's <i>SQL Settings</i> screen. Clicking OK on the error message and clicking Set Configuration again eliminates the error message.	254338
When the country is defined in Notes as <i>United States</i> , it will not synchronize to Exchange due to a constraint violation.	250246

Mail Connector known issues

Known issue	Issue ID
When an Outlook user invites a Notes user to a series of recurring meetings, and the Notes invitee accepts and then counterproposes a new time for the entire series or for " <i>this instance and all previous/future instances</i> ," the counterproposal may appear in some versions of Outlook with an empty message body and a superfluous <i>.gif</i> attachment.	309894 309885
Counter proposals sent from Notes incorrectly show the Exchange 2003 organizer in the <i>From</i> field instead of the person sending the counter.	298885
Outlook 2003 users see calendar attachments as mail message attachments.	298623
When the <i>location</i> field of a single occurrence of a recurring series is rescheduled by an Exchange 2003 user, the update sent to a Notes 6.5 user creates a duplicate of that meeting instance with the old location, and changes the location for all other instances still at the original scheduled dates.	298541
A recurring meeting sent from an Exchange 2003 user appears only on the first day of the series for a Lotus Notes 6.5.x user.	298322
Recurring meetings scheduled in Outlook for day 31 of each month and sent to a Notes 8.0.x or earlier invitee do not update correctly in the Notes calendar if the meeting is rescheduled in Outlook and the Notes invitee attempts to accept the update. An error is generated and the Notes calendar is not updated.	298292
Outlook 2003 may report an error for a mail message attachment that CMN generates from an <i>.ics</i> file attachment in a Notes-to-Exchange message. (Outlook 2007 and later, however, do not report errors for this.)	298231
The CMN Mail Connector service may be unable to process Notes active mail if the MC is running on a computer where any other process is using the Notes API.	138944
A recurring meeting sent from Domino to Exchange that contains more than 1000 dates or exceptions will be returned to the sender as a non-deliverable message.	064047
In some environments CMN cannot correctly process some changes to a recurring meeting after a user has been added to the invitee list.	221763

CMN cannot properly process a change in location for an entire series of a recurring meeting, scheduled in Outlook 2013 and accepted in Notes, if a single instance was previously rescheduled. 246051

CMN does not detect and intercept encrypted calendar invitations originating in Notes and sent to Outlook recipients, but Outlook cannot process an encrypted invitation. 088824

Free/Busy Connector known issues

Known issue	Issue ID
When a PowerShell command requests free/busy information, the time is returned in UTC instead of local time. This will be fixed in a later build.	217238
When a high volume of free/busy information is queried from the Domino server, the event log on the computer hosting the CMN web services may report this error: <i>Request failed. Unable to connect to the remote server.</i> The issue is related to exceeding the available TCP ports. As a workaround: <ol style="list-style-type: none"> 1 Apply registry changes as documented in Microsoft Knowledgebase article KB196271, and set <i>TcpTimedWaitDelay</i> to 30. For more information on <i>TcpTimedWaitDelay</i>, see this Microsoft article. 2 Restart your computer after applying these changes. 	119399
Running the cmdlet <i>Get-CmnExchangeWebServicesUrl</i> with an email address for an Exchange Online user may return inaccurate results. If you are connecting to Exchange Online, do not use the <i>Get-CmnExchangeWebServicesUrl</i> cmdlet. Use one of the following URLs: <ul style="list-style-type: none"> • For North America, use https://red001.mail.microsoftonline.com/EWS/Exchange.asmx. • For Europe, the Middle East, and Africa (EMEA), use https://red002.mail.emea.microsoftonline.com/EWS/Exchange.asmx. • For Asia Pacific (APAC), use https://red003.mail.apac.microsoftonline.com/EWS/Exchange.asmx. 	120051
When editing the Exchange F/B Connector Service to run as a user (rather than Local System), the admin must manually grant "logon as a service" to the account running the Connector after installation.	137831
Outlook 2007 does not update Free/Busy changes as quickly as OWA or Outlook 2010.	137842

Third-party known issues

Known issue	Issue ID															
OWA can render meeting start and end times only on the half-hour—e.g., 1:00, 1:30, 2:00, 2:30, etc. A meeting with a start time other than on a half-hour appears in OWA as starting at the preceding half-hour, and an end time other than on a half hour appears in OWA the next (following) half-hour. So, for example: <table border="0" style="margin-left: 40px;"> <tr> <td>Actual meeting time:</td> <td>Appears in OWA as:</td> <td>Outlook attached to O365:</td> </tr> <tr> <td>2:00-2:45</td> <td>2:00-3:00</td> <td>2:00-2:45</td> </tr> <tr> <td>2:15-2:30</td> <td>2:00-2:30</td> <td>2:15-2:30</td> </tr> <tr> <td>2:15-2:45</td> <td>2:00-3:00</td> <td>2:15-2:45</td> </tr> <tr> <td>2:25-3:35</td> <td>2:00-3:00</td> <td>2:25-3:35</td> </tr> </table>	Actual meeting time:	Appears in OWA as:	Outlook attached to O365:	2:00-2:45	2:00-3:00	2:00-2:45	2:15-2:30	2:00-2:30	2:15-2:30	2:15-2:45	2:00-3:00	2:15-2:45	2:25-3:35	2:00-3:00	2:25-3:35	173587
Actual meeting time:	Appears in OWA as:	Outlook attached to O365:														
2:00-2:45	2:00-3:00	2:00-2:45														
2:15-2:30	2:00-2:30	2:15-2:30														
2:15-2:45	2:00-3:00	2:15-2:45														
2:25-3:35	2:00-3:00	2:25-3:35														
This is an OWA rendering issue rather than a CMN issue, and occurs only in OWA, not in Outlook. The actual meeting times are correctly tracked in Exchange, so the same meeting appears in Outlook at its correct time, and free/busy queries are unaffected.																

System requirements

Before installing CMN 3.6, ensure that your system meets the following minimum hardware and software requirements.

Domino server(s)

CMN Components	Supported Domino versions		
All CMN components	Domino 6.5.1-6.5.6	Domino 8.0.0-8.0.2	Domino 9.0.1
	Domino 7.0.0-7.0.4	Domino 8.5.0-8.5.3	

CMN Components	Requirements
Directory Connector	For Domino 6.5.x (only), must disable constraint checking on LDAP writes.
Mail Connector	For Domino 6.5.1-6.5.6 systems (only): Communications between Domino and the CMN Mail Connector are improved by configuring a Domino 7 or 8 server to act as a bridgehead between CMN and the existing Domino 6 environment.
Free/Busy Connector	On Domino server hosting QCalCon task: <ul style="list-style-type: none"> QCalCon must run on a Domino server running on a Windows OS. Microsoft PowerShell 2.0, 32- or 64-bit (component of Windows Management Framework, downloadable at this Microsoft link). Also: In some environments this command may be necessary to enable the PowerShell layer using remote PowerShell: <pre>get-executionpolicy set-executionpolicy \$unrestricted</pre> Dell recommends 4GB memory with a two-core (or more) processor.

Notes client on end-user workstations

CMN Components	Supported Notes clients		
CMN Mail Connector and/or Free/Busy Connector	Notes 6.5.1-6.5.6	Notes 8.0.0-8.0.2	Notes 9.0.1
	Notes 7.0.0-7.0.4	Notes 8.5.0-8.5.3	

Exchange server(s)

The CMN Directory Connector, Mail Connector and Free/Busy Connector support these Exchange target types:

Exchange environments	Dir Connector	Mail Connector	F/B Connector
Exchange 2003	•	•	•
Exchange 2007: RTM	•	•	
Exchange 2007: SP1, SP2 or SP3	•	•	•
Exchange 2010: RTM, SP1, SP2 or SP3	•	•	•*
Exchange 2013: RTM or SP1	•	•	•
CAS Array (see note below **)	•	•	•
Office 365		•	•

* CMN's Free/Busy Connector does not support Exchange 2010 running in hosted mode.

** CAS Array in Exchange 2013 (RTM) or Exchange 2010 (RTM, SP1, SP2 or SP3).

Apple iPhone support: CMN processes Notes-to-Exchange messages so they will be compatible with Apple iPhone's iOS6 and iOS7.

CMN Components	Requirements
Directory Connector	An Exchange user account granted membership in <i>Organization Management</i> (for Exchange 2013 or 2010) or <i>Exchange View-Only Administrators</i> (for Exchange 2007). This user must be added to the ACL for the Windows domain, and must have <i>Create</i> and <i>Delete All Child Objects</i> permissions applied to <i>This object and all descendant objects</i> (domain object Properties Security tab Advanced Security Settings Edit).
Mail Connector	Smart hosts must be configured, if not using internal routing domains. (See <i>Email Coexistence Before and After CMN</i> in <i>User Guide</i> chapter 3.)

Active Directory server

CMN Component	Requirements
Directory Connector	The Exchange schema extensions on the AD server. Read/write access rights for the account configured to run the Directory Connector service. At a minimum, the target OU must be delegated to this account.

SQL server

	Requirements
For Directory Connector	<p>Access to a Microsoft SQL Server, installed on the CMN workstation or by connecting to an existing SQL instance, with a minimum of 20GB free disk space. Note:</p> <ul style="list-style-type: none"> You may use an existing (installed) Microsoft SQL Server version 2012, 2008 or 2008 Express, 2008 R2, 2005 or 2005 Express, or 2000, or you can download and install a free copy from Microsoft, from the link provided in the CMN AutoRun installer. <p><i>For best performance</i>, particularly at sites with a large number of groups or domains, Dell recommends a full-featured (non-Express) edition of SQL Server.</p> <ul style="list-style-type: none"> CMN running with SQL Server 2008 requires the SQL 2005 Native Client on the admin server to communicate with SQL. The SQL 2008 Native Client is not supported at this time. Any account used for SQL access must be configured (in SQL) with <i>sysadmin</i> and <i>dbcreator</i> permissions. If the DC will connect to SQL via Windows Authentication, the account must also have "<i>logon as a service</i>" permission.
Hardware Recommendations	<p>For < 30K users @ < 4 connector runs per day:</p> <ul style="list-style-type: none"> 2 cores (physical or virtual) 16 GB memory 200 GB free HD space <p>For 50K+ users @ 4 connector runs per day:</p> <ul style="list-style-type: none"> 4 cores (physical or virtual) 24 GB memory 500 GB free HD space

Outlook end-user workstations

Outlook clients:	Mail Connector	Free/Busy Connector
Outlook 2003	•	•*
Outlook 2007: RTM or SP1	•	
Outlook 2007: SP2	•	•
Outlook 2010, 32- or 64-bit	•	•
Outlook 2013, 32- or 64-bit: RTM	•	•

* But see *User Guide* chapter 4 for special F/B Connector configuration required for Outlook 2003 clients.

Outlook Web Access host server

CMN supports Outlook Web Access 2007, 2010 or 2013.

Admin CMN servers (running CMN components)



IMPORTANT: Admin CMN servers must reside on separate machines from the Exchange and Domino servers.

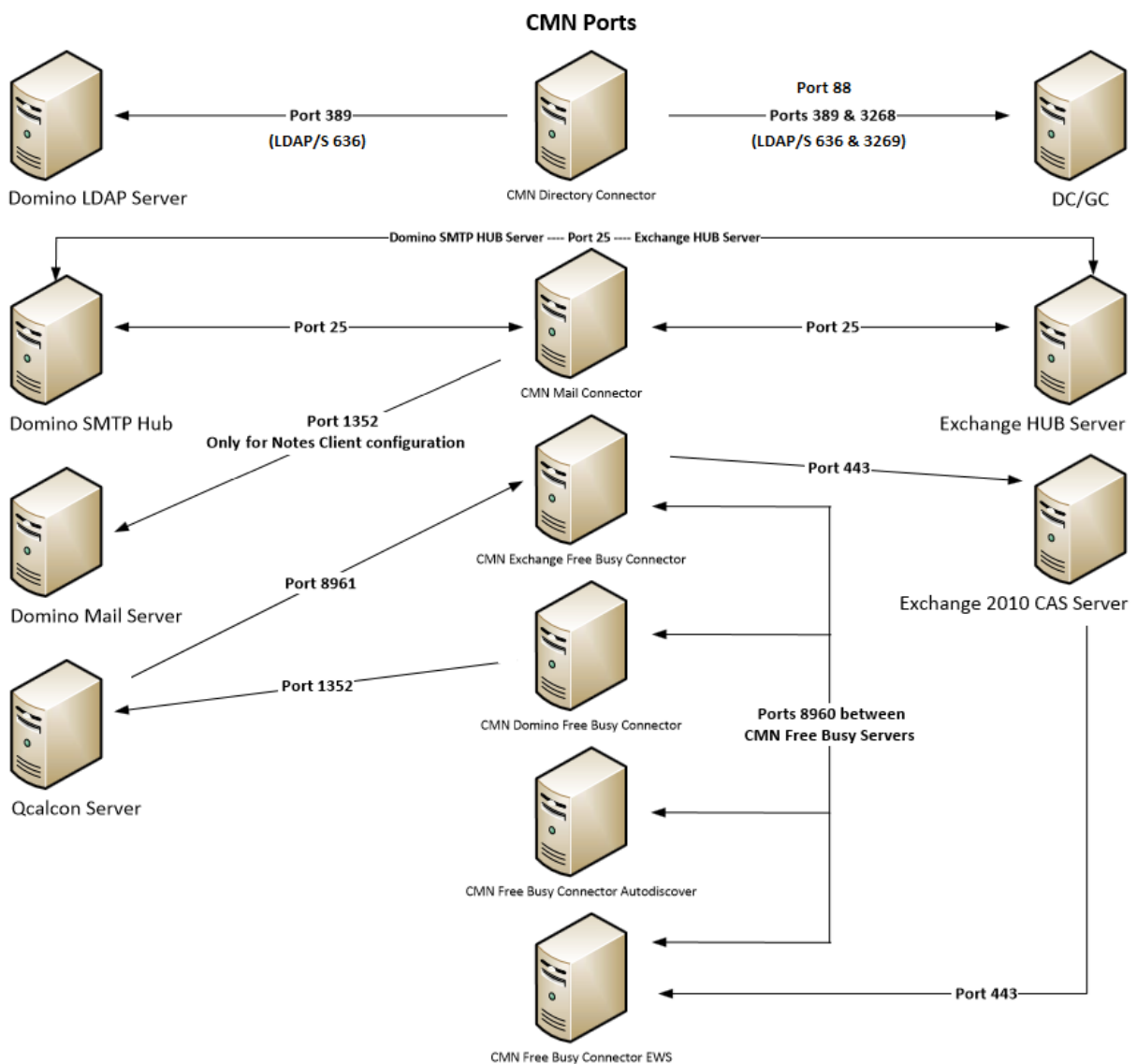
Operating Systems Supported:		Directory Connector	Mail Connector	Free/Busy Connector
Windows Server 2003, 32-bit	SP1	•	•	
	SP2	•	•	•
Windows Server 2003, 64-bit	SP2	•	•	•
Windows Server 2003 R2, 32- or 64-bit			•	•
Windows Server 2008, 32- or 64-bit	SP1 or SP2	•	•	•
Windows Server 2008 R2, 64-bit	RTM or SP1	•	•	•
Windows Server 2012	RTM	•	•	•
Windows Server 2012 R2		•	•	•

Hardware Specifications	Minimum Required	Recommended
Directory Connector	<ul style="list-style-type: none"> • 500MB disk space • 2GHz processor • 4GB memory 	<ul style="list-style-type: none"> • 1+GB disk space • 2- or 4-core processor • 8GB memory
Mail Connector and/or Free/Busy Connector (for each)	<ul style="list-style-type: none"> • 20GB disk space • 4-core 3+GHz processor • 4GB memory 	<ul style="list-style-type: none"> • 20GB disk space • 8-core 3+GHz processor • 8-16GB memory

CMN Component	Requirements
On any computer hosting any CMN component	<p>Microsoft .NET Framework 2.0, 3.51, and 4.0 Full Framework. (The CMN Installer provides a link to these, as a convenience, if they are not already installed.)</p> <p>Active mail processing requires Lotus Notes client 7.0.3 or 7.0.4, or Lotus Notes Basic (not Eclipse) 8.0.0.</p>

CMN Component	Requirements
Free/Busy Connector	<p>CMN F/B Connector servers must reside in the same domain as Exchange.</p> <p>Microsoft PowerShell 2.0, 32- or 64-bit (a component of Windows Management Framework, downloadable at this Microsoft link). Also: In some environments this command is necessary to enable the PowerShell layer using remote PowerShell: <pre>get-executionpolicy set-executionpolicy \$unrestricted</pre></p> <p>Lotus Notes Client 7.0.x to 9.0.1, installed in single-user mode.</p> <p>CMN's Autodiscover and EWS require Microsoft IIS 6.0, 7.0, 7.5 or 8.5, and:</p> <ul style="list-style-type: none"> • If IIS 6.0, 7.0 or 7.5: IIS must be configured and enabled to use ASP.NET 4.0. • If IIS 8.5: IIS must be configured and enabled to use ASP.NET 3.5 and 4.5.
Directory Connector	Dell recommends that CMN servers reside in the same domain as Exchange.
Mail Connector	CMN servers can reside anywhere (no domain membership requirement).

CMN port assignments



Upgrade and compatibility

There is no need to uninstall a version-3.5.x CMN before installing this new version. The CMN AutoRun application will detect any version-3.5.x installation and install the new software accordingly. If you are upgrading from a CMN 3.5.x, the automated upgrade process will transfer your existing license key into the new version, so you need not re-install it.

There is no direct upgrade path to CMN 3.6 from any pre-3.5 version of CMN. To upgrade from a pre-3.5 version to CMN 3.6 you must first upgrade to 3.5 (as described in the *Quick-Start Guide* for version 3.5), and then upgrade from 3.5 to 3.6.

Product licensing

Dell Coexistence Manager for Notes is a metered-use product that requires the application of a valid license key. When the product is installed you must install a Dell license key before you can run any CMN Windows service and before the CMN Management Console will save any configuration entries. The license key must be installed in the CMN Management Console, in the *Common / Licenses* screen.

You can obtain your first or a subsequent license key by contacting a Dell Software sales representative. For either a trial or perpetual license, the key takes the form of a file *CoexManagerNotes-###-#####.asc* (where *###-#####* represents your unique license number), sent to you from Dell Licensing as an email attachment.

If you are upgrading from CMN version 3.5, the automated upgrade process will transfer the existing license key into the new version, so you need not re-install it.

To install your license key if you are installing CMN for the first time:

- 1 Copy to your Desktop, or to some other convenient location, the license file (*CoexManagerNotes-###-#####.asc*) sent to you by email from Dell Licensing.
- 2 If you have not installed Coexistence Manager for Notes, run the *Setup* program to install the software (as described in the [Upgrade and installation instructions](#) below).
- 3 Once the software is installed, run the CMN Management Console. Select **Licenses** under the *Common* section of the Management Console, and click the **Update License...** button. Select your license, and then click **OK**.
- 4 You may review your installed licenses in the *Licenses* section of the configuration utility.
- 5 If you have previously installed a trial or other permanent license on your computer, you can upgrade to your new license by using the *License* screen within the Configuration utility. Click on the **Update License...** button to direct the program to the License Key file.

Getting started with CMN 3.6

- [Deployment considerations](#)
- [AutoRun](#)
- [Upgrade and installation instructions](#)

Deployment considerations

CMN's three primary components are installed, configured and run independently. Each component's operations require the connection and coordination of three separate environments: the Notes and Exchange environments, and the server(s) between them hosting the CMN applications. CMN operations also require the use of accounts with suitable access rights to Exchange and Notes, and of course the CMN components themselves must be configured for your own environment and operational preferences.

i **IMPORTANT:** When configuring CMN for a hosted Exchange (such as Office 365), it is particularly important to involve your IT security specialists early in the project planning, to accommodate all of the account permissions and configuration requirements that are unique to the hosted system.

Before installing CMN, it is important to document a deployment plan. The plan should specify the components, where they will be installed, and how many instances will be required. You can install and configure the CMN components in any order you like, but consider that the Directory Connector provides directory updates the Free/Busy Connector needs to facilitate its functionality.

It is possible to install two or more CMN components on a single server, but some production environments with a greater volume of message and free/busy traffic may benefit from installing on separate servers for optimal performance. One common approach involves installing the three CMN components to three separate computers, one for each component.

Environments with very high message volume may also deploy multiple Mail Connectors and/or install the Free/Busy components on different computers:

- Directory Connector
- Mail Connector 1
- Mail Connector 2
- Mail Connector [n] ...
- Free/Busy Connector for GW-to-Exchg F/B queries
- Free/Busy Connector for Exchg-to-GW F/B queries

For more information, review *Mail Connector Deployment Options* in chapter 3 of the *CMN User Guide*.

When the Free/Busy subcomponents are deployed to separate computers (when coexisting with Notes 8 or later), they are typically installed like this:

F/B Connector for GW-to-Exchg F/B queries:

- CMN Exchange Free/Busy Service
- CMN Free/Busy Bridge

F/B Connector for Exchg-to-GW F/B queries:

- CMN Notes Free/Busy Service
- CMN Autodiscover
- CMN EWS (Exchange Web Services)

The relative processing and hardware requirements of the different components will vary based on the typical activity in each environment. However, the Free/Busy Connector will see heavier demand in many environments. The Mail Connector will also have requirements around mail and calendar processing, but the volume of required updates may not be excessive for many Notes and Exchange coexistence environments. Directory Connector activity is typically scheduled and requires resources only during active processing. As a result, the demands and requirements are typically lower than either the Mail Connector or Free/Busy Connector.

AutoRun

The installation media for CMN includes an *autorun.exe* application. The AutoRun application provides access to useful information and links to tools needed for the CMN product, including:

- Prerequisites
- Documentation
- Installation
- Community
- Dell Support
- Dell Contact Information

The AutoRun **Install** tab includes links to install CMN components, and some additional tools:

- **Software Updates:** Includes a link to versions of CMN available for download.
- **Coexistence Manager for Notes Mail Connector:** Includes a link to open the CMN Mail Connector Setup Wizard.
- **Coexistence Manager for Notes Directory Connector:** Includes a link to open the CMN Directory Connector Setup Wizard.
- **Coexistence Manager for Notes Free/Busy Connector:** Includes a link to open the CMN Free/Busy Setup Wizard.
- **PowerGUI:** Includes a link to open the Dell PowerGUI Installation Wizard. PowerGUI is an extensible graphical administrative IDE for managing systems based on Windows PowerShell.
- **Mobile IT:** Mobile IT allows administrators to take advantage of Dell tools from their mobile devices.
- **Mobile Pack:** Provides CMN information to the Mobile IT system.

i **IMPORTANT:** CMN's Directory Connector, Mail Connector and Free/Busy Connector are independent components that are installed separately. The CMN AutoRun installer lets you choose the CMN component you want to install, and *must be run on the computer where you want to install the component*. (If you want to install different CMN components on different computers, you must run AutoRun on each computer.)

Upgrade and installation instructions

There is no need to uninstall a version-1.4 CMN before installing this new version. The CMN AutoRun application will detect any previous version-1.4 installation and install the new software accordingly.

CMN 3.6 supports a direct upgrade only from CMN version 3.5.x. If you want to upgrade from an earlier version, you must first upgrade to a 3.5.x version, and then upgrade to 3.6.

i **IMPORTANT:** *If installing to Windows Server 2008 or later:* Dell recommends that you temporarily turn off Microsoft's UAC (User Account Control) during CMN installation, because UAC interferes with some CMN installer functions in many environments. UAC can then be re-enabled after CMN installation.

If you choose to not disable UAC while installing CMN, then you *must* perform this procedure for CMN to work properly:

- 1 Install CMN as described below.
- 2 Right-click on a shortcut to *cmd.exe*, and select "*run as administrator*."
- 3 Enter the command:

```
regsvr32 "c:\program files (x86)\common files\dell\quest\license.dll"
```

NOTE: Running the installer with admin privileges will *not* negate the need for this workaround.

To install Coexistence Manager for Notes:

- 1 Review the [Deployment considerations](#) above, and map out your intended deployment before you begin to install CMN components.

- 2 Download Coexistence Manager for Notes from the *software.dell.com* website, and extract all files into a temporary folder. Then run *AutoRun.exe* from the installation folder.

(Or you could instead simply insert a CMN product CD, which starts the AutoRun utility automatically.)

In the AutoRun utility you can browse product information including the **Prerequisites** and all **CMN Documentation** before installing the product.

- 3 Verify that your environment conforms to the [System requirements](#) specified above. Several of the required third-party components may be downloaded from links on the AutoRun **Prerequisites** tab.
- 4 When you are ready to install, select the AutoRun **Install** tab.
CMN components are listed separately and installed independently.
- 5 Click the name of the component you want to install.
- 6 Click **Next**, and then read and accept the license agreement.
- 7 Follow the remaining instructions and prompts in the CMN Installer, and click **Finish** from the last screen to complete the installation. The CMN Installer then exits, returning you to the AutoRun utility, on the **Install** tab.
- 8 If you want to install another CMN component on this same computer, go back to step 5. If not, you may browse the other AutoRun tabs if you like.
- 9 When you are finished installing components on this computer, and browsing other tabs, click the **Close** box ([X] in the top-right corner of the window) to close the AutoRun utility.
- 10 Unbind the default website from ports 80 and 443.
- 11 If you are upgrading your Directory Connector from a pre-3.6 version: The Directory Connector's underlying engine has been updated in version 3.6, requiring a reconfiguration of the associated SQL database. This release of CMN includes a special utility that can perform this reconfiguration automatically. After you have upgraded the DC software:

- Find and run the file *CMX.Apps.QcUpgradeConfiguration.exe* (in the Directory Connector's installation directory, typically *C:\Program Files\Dell\Coexistence Manager for Notes\Directory Connector*).

This utility should be run just once, before your first run of the Directory Connector after you upgrade from a pre-3.6 version.

CMN component operations are configured and controlled by settings and values entered in a *Management Console*—for names and locations of mail servers and directories, scope of operations, operational options, scheduled runs, and so forth. The CMN Management Console is used to configure all three CMN components, although different components' settings are managed on different screens.

Detailed configuration instructions for CMN components are beyond the scope of these installation instructions. Configuration instructions and pertinent notes are provided in the *CMN User Guide*.

- NOTE:** Upon upgrading the Free/Busy Connector from CMN 3.5 to version 3.6, the F/B Management Console asks if you want to "save changes" to the configuration even if you haven't made any changes. This may be confusing, but the Console is actually detecting changes that accompanied the FBC upgrade, so just confirm that you want to save the changes, and the Console will not ask again.
- IMPORTANT:** When making backups of CMN directories, do not keep the backups in the same subtree root folder as the original program directories. The CMN programs will see and try to use the backups if they reside in the same subtree root folder.

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan. The release supports Complex Script (Central Asia - India, Thailand).

This release has the following known capabilities or limitations: Localizability will be built in, but localization will be some quarters off.

Customers can customize end-user facing messages, allowing them to localize some content themselves.

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Product questions and sales: (800) 306-9329

Email: info@software.dell.com

Technical support resources

Technical support is available to customers who have purchased Dell software with a valid maintenance contract and to customers who have trial versions. To access the Support Portal, go to <http://software.dell.com/support/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. In addition, the portal provides direct access to product support engineers through an online Service Request system.

The site enables you to:

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- View Knowledge Base articles
- Obtain product notifications
- Download software. For trial software, go to [Trial Downloads](#).
- View how-to videos
- Engage in community discussions
- Chat with a support engineer

Third-party contributions

This product contains the third-party components listed below. For third-party license information, go to <http://software.dell.com/legal/third-party-licenses.aspx>. Source code for components marked with an asterisk (*) is available at <http://opensource.dell.com>.

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