Please note

IBM’s statements regarding its plans, directions, and intent are subject to change or withdrawal without notice and at IBM’s sole discretion.

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The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user’s job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.
WHO AM I

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- IBM Germany
- Email: thomas.hampel@de.ibm.com
- Blog: http://www.thomashampel.com
- Twitter: @thomashampel

#dominoforever
**Domino V10**

**App Dev**
---
Domino rocks JavaScript with Node.js
- New business opportunities while leveraging existing investments
- Access and use of new capabilities and communities

**Experience**
---
World-class Mail and Mobile Apps
- Run your Domino apps on smart tablets and smart phones
- Richer email with more capable IBM Notes and IBM Verse on Premises

**TCO**
---
Trusted, Faster, Bullet Proof
- Self-healing and more robust databases and indices
- Integration with enterprise authentication standards made easy

#dominoforever
App Dev with Node.js – Why should I care?

Benefits
• Reuse of existing code and data
• New app opportunities
• Modern ecosystems
• Abundant skills

Use Cases
• Create extensible APIs with ease
• Integrate with external services
• Add new value to existing apps
Why Node.JS with Domino?

• //EDIT : Picture not available
What does “Full Stack Web Development” mean? NERD, NEDV, DEAN...Duh!

> npm install --save domino-db
DEMO TIME

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What’s New in
IBM Domino V10
# Domino Query Language (DQL) value

| For Domino beginners | - Database context-free searching – no deep design knowledge required  
| - Built with node.js as target environment and programming model |
| Set-based processing | - Simple yet powerful bulk-operations support  
| - No need to code loops or do document-at-a-time processing |
| Programming power | - Full support for boolean processing - AND, OR, NOT  
| - Concise shorthand accomplishing complex and detailed find operations  
| - Simple to read EXPLAIN output to show how to optimize |
| High performance | - Automatically finds view columns to use to satisfy query terms  
| - Partial results injected into child and sibling processing for smart, optimal atomic search operations  
| - Limit values in the API to control runaway queries |
| Guards investment | - Runs in Java, LotusScript, node.js or command line  
| - Perfect fit into Domino backend DocumentCollection object |
| Domino centric | - All documents in existing or new Views or Folders can be ANDed, ORed  
| - View/Folder column values (utilizing all existing design)  
| - @ModifiedInThisFile, @DocumentUniqueID, @Created support |

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Breaking NSF Boundaries

- Maximum database size: 65GB to 256GB
- Large Folders: Doubled to 65k with a 50x increase
- Summary Data: @32 bytes/name
- More Field Names: 23k to 60k with a 10x increase
- ID Tables

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Delayed / Timed Mail Delivery

- Ever want to reply to a message but not start an email volley?
- Want to delay a message send but write it now?
- Create a message, press send but set a delay in delivery options before the router releases
  - This is controlled by setting an attribute the router will check
  - Application developers have at it!

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Scheduled Mail

• Delivery date/time can be provided on any email submitted to a Domino 10 server
  • $SendAt item can be added by agent, custom template, etc.
  • Domino will do minimal checks immediately – e.g., maximum message size being exceeded
• Server Configuration document: Router/SMTP > Restrictions and Controls > Transfer Controls
• Notes will support scheduled mail in Domino 10 – policy controlled
Automated Dead Mail Processing Option

- Mail router will periodically retry delivery/transfer to account for cases where configuration or other environmental issues caused the mail to fail
- Configurable retry count and interval, after retries are exhausted, dead mail will be deleted from mail.box
- Server Configuration document: Router/SMTP > Advanced > Controls > Undeliverable Mail
Full Text Search Improvements

• Update index on search
  • (Almost) Always get up to date search results – will index up to 200 documents before doing search
  • If out of date more than 200 documents, will queue update request for immediate action

• Improved attachment indexing – very helpful for GDPR
  • Domino 10 replaces KeyView filters with Apache Tika for more accurate text extraction – document types, efficacy, language handling – but you have to choose it!
Full Text Index Resiliency Improvements

• Automatic index recreation on corruption
  • If index is being updated or searched and corruption is detected – Domino will automatically rebuild the index

• Repeat crash prevention
  • Domino will be resilient to FT search or update related crashes – if repeated it will automatically rebuild the offending index.

• DBMT allows scheduled rebuilding of full-text indexes – helps performance and resiliency
  • e.g., -ftiThreads 5 –ftiNDays 30

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Domino 10 Statistics Publishing

• Publish Domino server statistics via HTTP Post for real time monitoring
• Publishing to New Relic built in (See New Relic Plugins for overview)
  • Default New Relic Plugin dashboard for viewing sample metrics
  • Customization of URI and data format to allow publishing to other consumers
• All numeric Domino statistics posted once per min.

• Bonus!
  Domino will automatically calculate and send rate metrics for common counters
  • E.g. Mail.TotalRouted → Delta/Mail.TotalRouted for mails routed per minute

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Domino Statistics – New Relic
Domino Statistics – New Relic
Domino Statistics – InfluxDB and Grafana

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Automatic Cluster Database Symmetry

• Automates keeping NSF and DAOS content synchronized in a cluster
Symmetric Domino Servers

- One or more data directory folders are declared to be symmetrical
  - Any Notes database which exists on any server in the cluster must exist on every server in the cluster.
  - Domino 10 “repair engine” will detect any missing databases and repair them automatically

Symmetric clusters enable several enhanced capabilities to improve resiliency....
Automatic Database Repair

- Repair will periodically check for missing databases and repair them automatically
  - High speed transfer of file(s) between servers
  - Any required DAOS objects are repaired automatically
  - Replication histories are adjusted to correctly reflect replication currency
  - Full Text indexes are rebuilt if necessary
Autonomic Database Repair

- Corrupt databases detected on open
  - DbFixup attempted, Repair executed if needed

Before

<table>
<thead>
<tr>
<th>Server A</th>
</tr>
</thead>
<tbody>
<tr>
<td>mail1</td>
</tr>
<tr>
<td>mail2</td>
</tr>
<tr>
<td>mail3</td>
</tr>
<tr>
<td>mail4</td>
</tr>
</tbody>
</table>

After

<table>
<thead>
<tr>
<th>Server A</th>
</tr>
</thead>
<tbody>
<tr>
<td>mail1</td>
</tr>
<tr>
<td>mail2</td>
</tr>
<tr>
<td>mail3</td>
</tr>
<tr>
<td>mail4</td>
</tr>
</tbody>
</table>

Dynamic Repair

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DAOS Repair

- Database repair is just one use of a broader DAOS repair capability!
- DAOS resync will repair any missing NLO’s
  - Not limited to symmetric databases, works for ALL DAOS objects
- DAOS will detect corrupted NLO’s on open and dynamically repair the file
  - Even if DAOS encryption is enabled properly: decrypts -> streams -> re-encrypts

Server A
mail1  | mail2  | mail3  | mail4

Server B
mail1  | mail2  | mail3  | mail4

DAOS repair makes the DAOS repository “self healing”
Automatic Hot View Updating

• Before Domino 10
  • Update task – queued requests processed in order
  • Inline View Indexing/Dedicated View Threads features assisted very knowledgeable administrators
  • But – end users and applications might see out of date views or have to wait for view updates before being able to access them

• With Domino 10
  • Domino tracks view updates and reads in real time
  • “Hot” views are updated in real time without administrator’s having to guess or track
Note Deletion Logging

- No more need to guess “who/what” deleted that document
  - Enable deletion logging using Compact utility
  - e.g. load compact mail -deletionLogging on "SendTo,From,PostedDate,$TITLE"

- Every NoteDelete will generate a log entry including
  - Date and time the document was deleted
  - Database from which the document was deleted.
  - Replica ID of the database
  - Process that performed the deletion (server, dbmt, replica, etc.)
  - Identity that performed the deletion
  - Type of document deletion (SOFT, HARD, RESTORE)
  - Note class (numeric)
  - Document UNID
  - Additional note item(s) specified when enabled

Example:
10/22/2018 06:27:10 PM, branney.nsf, 052581F8:005CB5E7, server, CN=Mail2/O=Renovations, SOFT, 0001, B1A644C2:EAC0720905258203:0080D2BC,From:Samantha Daryn
DAOS Resynchronization Speedup

• Significantly improve resync performance
  • ODS53 enhancements reduce I/O when scanning databases for DAOS references
  • Improved concurrency to reduce contention during resync
  • 25% faster so far

• Improved monitoring and metrics
  • Resync progress indicators
  • Counters for number of objects, number of references and sharing (refs/object)
Domino SSL Ciphers

Before
• TLS 1.2 ciphers not (anymore) configurable in UI – notes.ini setting required

With Domino 10:
• All supported Cipher available in User Interface
SAML Improvements

• Before Domino 10
  • Domino supports ADFS 2.0/3.0, TFIM SAML 1.1/2.0
  • Does not support Service Provider initiated authentication flows

• With Domino 10
  • ADFS 4.0 will be fully supported
  • Supports Service Provider initiated flows
  • Domino 10 will work with any SAML 2.0 compliant IDP – we will be adding others to support list
What’s New in IBM Notes Client V10

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Notes Client Workspace
Color Themes

Customize Theme

Pick a color of your choice and build your own theme! You can also use 'Customize individual components' section to modify specific component colors.

Note: Some component colors will not take effect until the program is restarted.

Choose your theme:

Customize individual components
- Navigator
- Shortcut & Status bar
- Tab
- Side Shelf
- View action bar
- Calendar

[Buttons: Restore Defaults, Apply, OK, Cancel]
<table>
<thead>
<tr>
<th>Recipient</th>
<th>Subject</th>
<th>Date</th>
<th>Size</th>
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</thead>
<tbody>
<tr>
<td>Ram</td>
<td>Re: PMR 20106,112,848</td>
<td>Apr 5</td>
<td>12K</td>
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<td>Daniele Di Carlo</td>
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<td>Sheng Jun Wang</td>
<td>Fw: Eclipse ed Sametime sidebar issue</td>
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<td>53K</td>
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---

**Fw: Retain.nsf update notice pmr: 20106,112,848**

**Bhavana R Gaikwad**  to: Daniele Di Carlo/Germany/IBM

04/02/2018 03:35 PM

Hi Daniele,

I have provided the download details for CCM installer in the PMR. Please refer to below mail chain.

Thanks

Bhavana

----- Forwarded by Bhavana R Gaikwad/India/PNPHCL on 04/02/2018 03:33 PM -----
Notes UI Improvements

1. Quick Contact

2. Updated Date Picker

#dominoforever
Notes Font Picker Improvements

1. Mail
   ![Mail Font Picker]

2. Applications
   ![Applications Font Picker]
Windows Tablet With Touch Screen
Mail Improvements

IBM Notes V10 client
Email as EML

- Send fully formatted and intact Notes email messages as EML attachments
- EML files can be opened and read by Microsoft Outlook and Apple Mail
- Send multiple messages as attachments to one email
Email as EML

- Forwarded mail just has the content stripped of structure and context
- Forwarding of multiple mails are created as a single mail conversation
- EML files can contain attachments as well as messages
- Messages saved in standard MIME format
Send Mail Policy Improvements

- Mail policy settings controlled by administrators
- Checks before sending using ‘before send’ hooks in the mail template
- Set options in the policies at warning or deny level
Group By Sender View

• Categorised inbox style view by “Sender”
• Sender view can be used as an alternate inbox and contains all messages that were received, even those that are filed in folders
• Type ahead matches any character string in the name, not just the initial one
Group By Sender View

- All inbox actions including setting preferences exist in the folder
Multiple Email Signatures Support

- Separate Signatures for new emails and reply/forwards
- By default, reply/forwards will use existing signature unless the user sets up a separate reply/forward signature
Client Size Limitations Increased

Upgrade Folder Designs Limit Increased to 64K

Junk Folder Rules Limit Increased to 64K
Team Calendar

- Not part of a single user’s mail file
- Created using a standard template that can also include a team inbox
- Any member of the team calendar can manage / create / edit the invites
Forward Invites To Others

• Invite other people to a meeting you are invited to
• Invite someone else for a single meeting or repeating meetings
Forward Invites To Others

• The invite chair controls whether additional invites are allowed on a meeting by meeting basis
  • Outlook can’t offer this granular control
Color Coding Calendar Entries By Chair

• Visually identify all invites from specific people
• Color code your inbox senders to match your calendar invites automatically
• Color coding of calendar entries by chair overrides the color coding by calendar type
Color Coding Calendar Entries By Chair
Delegate Calendar w/o Contacts

**Add People/Groups**

**Person or Group**
- To whom do you want to give access to your mail file?
  - Everyone
  - Just this person or group: [Field]

**Components**
- Which components of your mail file do you want to give access to?
  - Mail, Calendar, To Do and Contacts
  - Calendar, To Do and Contacts
  - Calendar and To Do
  - None

**Access**
- How much access do you want to give for Calendar and To Do?
  - Read
  - Read, create, edit, and delete

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Out Of The Box Calendar Interoperability

By default, calendar interoperability with Exchange just works!

Only if other interoperability are needed, the policy needs to be enabled
NOW V10 IS HERE, WHAT'S THE STRATEGY

BHAG: “The application platform that business users tap to solve their collaboration and automation intensive business problems – by anyone, anywhere.”

Domino V10
- Faster
- Modern
- Lower TCO
- Open and Easy to Integrated

Domino V11
- Engage the “Citizen Developer”
- Evolve Email and add powerful Analytics
- Improved Operations

#dominoforever
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<tr>
<th>Feature</th>
<th>Status</th>
<th>Access URL</th>
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<tbody>
<tr>
<td>Domino 10.0</td>
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<td>Access via ibm.biz/BuyDominoV10</td>
</tr>
<tr>
<td>Domino App Dev Pack</td>
<td>Early</td>
<td>Upgrade to Domino 10.0</td>
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<td></td>
<td>access</td>
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<td>Domino Mobile Apps</td>
<td>Register now* Oct 31</td>
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<td>Access via ibm.biz/V10MobileApps</td>
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<td>Notes 10.0.1 for macOS</td>
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#dominoforever
## Features Availability

<table>
<thead>
<tr>
<th>Features</th>
<th>Template(s) Dependencies</th>
<th>Smart Cloud</th>
<th>Beta Candidate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Update</td>
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</tr>
<tr>
<td>Forward Invite</td>
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<td>Forward as attachments</td>
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<tr>
<td>Group By Sender</td>
<td>V10 Mail template</td>
<td>Available</td>
<td>Yes</td>
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<tr>
<td>Mail Send Policy</td>
<td>V10 Mail, Pub names template</td>
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<td>Yes</td>
</tr>
<tr>
<td>Team Calendar</td>
<td>V10 mail template</td>
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<td>Yes</td>
</tr>
<tr>
<td>Calendar color coding by chair</td>
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<tr>
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<tr>
<td>Workspace UI</td>
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<tr>
<td>Customize UI</td>
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<td>Quick Contacts</td>
<td>Per names and mail template</td>
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<td>Delegate Calendar only</td>
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<tr>
<td>Touch Screen Support</td>
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</table>
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<table>
<thead>
<tr>
<th>Features</th>
<th>Template(s) Dependencies</th>
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<th>Beta Candidate</th>
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<tbody>
<tr>
<td>StartTLS support</td>
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<td>Default Calendar Interop</td>
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<tr>
<td>Updated Font Picker</td>
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<tr>
<td>Updated Date Picker</td>
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<td>Improved copy/paste for editor</td>
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<tr>
<td>Improved reply rendering</td>
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<tr>
<td>V10 Embedded Sametime</td>
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<td>Available</td>
<td>Yes</td>
</tr>
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</table>

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<th>Smart Cloud</th>
<th>Beta</th>
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<tr>
<td>Some Preferences enabled by Default</td>
<td>V10 Mail template</td>
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<tr>
<td>Deprecate Open Social</td>
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<td>Deprecate Embedded Experience</td>
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<td>Deprecate RSS Feedreader</td>
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<td>Deprecate Struts/Apache</td>
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<td>Simplify Archiving</td>
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<td>Import/Export support for XLS</td>
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<tr>
<td>Mac parity with Windows</td>
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