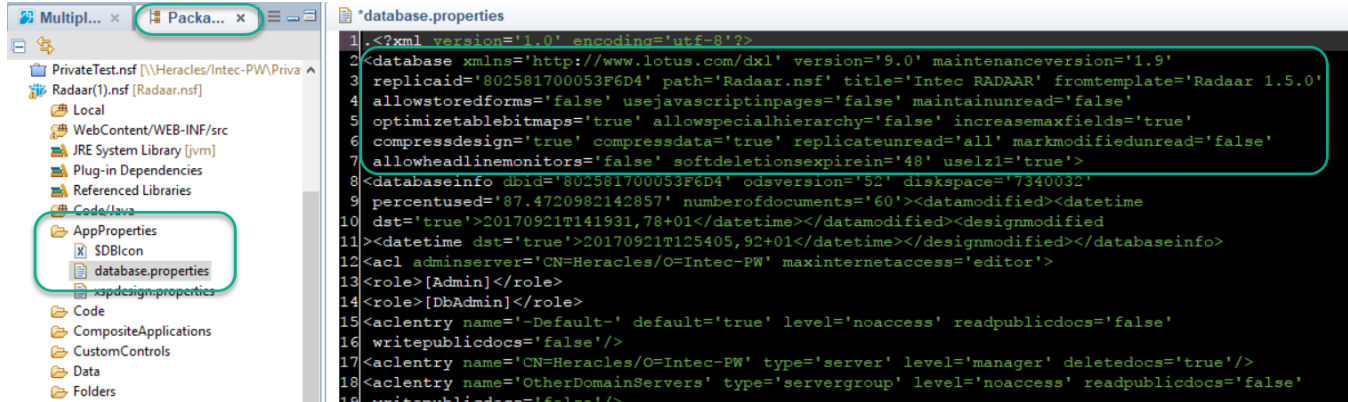


Managing Database Properties

There are a host of database properties. Some have historically been accessible from Database class, but some are accessible only via DXL. You can view these in Domino Designer, in the Package Explorer view, by opening up AppProperties and database.properties.



How Are They Stored and Retrieved

The key here is that you need to export more than one design note to get the database element (e.g. export the ACL and Icon note, which is what's done in this design element). From here, all the properties visible on the Database Properties infobox in Notes are accessible as well as some database properties not exposed there (e.g. whether DAOS is enabled). Some are attributes of the database element, some are items on the Icon note. Some are set as attributes if they're checked, some set if they're not checked. Some are boolean values. Some, like `fromtemplate`, are text. Some, like `softdeletionsexpirein` or `maxupdatedby`, have numeric values stored as text attributes. The good news is the API makes them all accessible from the `DatabaseDesign` object, even if they're actually stored in the Icon note.

Retrieving the Database Design

To access the Database Design object for a specific database, just use `Database.getDesign()`.

Database Properties

The Database Properties are available via the `getDatabaseProperties` and `setDatabaseProperties` methods. The getter returns a `List<DbProperties>` object and the setter takes a `Map<DbProperties, Boolean>`. However, some Database Properties cannot be set because they have specific setter methods (template name) or need to be enabled via server commands (e.g. DAOS). Below are the details of all the Database Properties available, where they appear on the Database Properties infobox and setter information.

| On Infobox | Label | Database Property | Stored As | Value | Notes |
|------------|---------------------------------|-----------------------------------|---|-------|--------------------------------------|
| Basics Tab | Use JS when generating pages | USE_JS | usejavascrip tinpages attribute | false | Missing in DXL if checked |
| Basics Tab | Require SSL | REQUIRE_S SL | requiressl attribute | true | Missing in DXL if not checked |
| Basics Tab | Don't Allow URL Open | NO_URL_OP EN | nourlopen attribute | true | Missing in DXL if not checked |
| Basics Tab | Enable Enhanced HTML Generation | ENHANCED_ HTML | \$AllowPost8 HTML item in Icon | 1 | Missing if not checked |
| Basics Tab | Don't Allow ICAA | BLOCK_ICAA | \$DisallowO penInNBP item in Icon | 1 | Missing if not checked |
| Basics Tab | Disable Background Agents | DISABLE_BA CKGROUND_ AGENTS | allowbackgr oundagents attribute | false | Missing if not checked |
| Basics Tab | Allow Stored Forms | ALLOW_STO RED_FORMS | allowstoredf orms attribute | false | Missing if checked |
| Basics Tab | Display Images After Loading | DEFER_IMA GE_LOADING | imageloads deferred attribute | true | Missing in DXL if not checked |

| | | | | | |
|-------------------------|---|-----------------------------|-----------------------------------|--------------|---|
| Basics Tab | Allow Document Locking | ALLOW_DOC_LOCKING | allowdocum entlocking attribute | true | Missing in DXL if not checked |
| Basics Tab | Inherit OS Theme | INHERIT_OS_THEME | inheritosthe me attribute | true | Missing in DXL if not checked |
| Cache Expiry Days (DDE) | CSS files | | \$CSSExpires in Icon | 2 | setCssExpiry(int), use Integer.MIN_VALUE to remove it. Added in ODA 4.3.0 |
| Cache Expiry Days (DDE) | Files | | \$FileExpires in Icon | 2 | setFileExpiry(int), use Integer.MIN_VALUE to remove it. Added in ODA 4.3.0 |
| Cache Expiry Days (DDE) | Image Files | | \$ImageExpires in icon | 2 | setImageExpiry(int), use Integer.MIN_VALUE to remove it. Added in ODA 4.3.0 |
| Cache Expiry Days (DDE) | JavaScript Files | | \$JSExpires in Icon | 2 | setJsExpiry(int), use Integer.MIN_VALUE to remove it. Added in ODA 4.3.0 |
| Design Tab | Allow Design Locking | ALLOW_DESIGN_LOCKING | allowdesignlocking attribute | true | Missing in DXL if not checked |
| Design Tab | Show in Open Dialog | SHOW_IN_OPEN_DIALOG | showinopendialog attribute | false | Missing in DXL if checked |
| Design Tab | Include in Multi-Db Indexing | MULTI_DB_INDEXING | multidbindexed attribute | true | Missing in DXL if not checked |
| Design Tab | Don't Mark Modified Unread | MODIFIED_NOT_UNREAD | markmodifiedunread attribute | false | Missing in DXL if not checked |
| Design Tab | Mark Parent on Reply / Forward | MARK_PARENT_REPLY_FORWARD | trackreplyforward attribute | true | Missing in DXL if not checked |
| Design Tab | Inherit Design from Master Template | INHERIT_FROM_TEMPLATE | fromtemplate attribute | demoDatabase | Database Property determines if the database is set to inherit from a template. Use <code>getTemplateName()</code> to get the name of the template it inherits from. <code>setTemplateName(String)</code> must be used to set / clear the property. |
| Design Tab | Database File is a Master Template | DB_IS_TEMPLATE | templatename attribute | demoDatabase | Database Property determines if the database is a template. Use <code>getNameIfTemplate()</code> to get the template name. <code>setNameIfTemplate(String)</code> must be used to set / clear the property. |
| Design Tab | List as Advanced Template in 'New Application' Dialog | ADVANCED_TEMPLATE | advancedtemplate attribute | true | Missing in DXL if not checked |
| Design Tab | Multilingual | MULTILINGUAL | multilingual attribute | true | Missing in DXL if not checked |
| Launch Tab | Run server-based XPages apps directly on Server | LAUNCH_XPAGE_ON_SERVER | \$LaunchXP ageRunOnServer on Icon | 1 | Missing if not checked |
| Advanced Tab | Don't Maintain Unread | DONT_MAINTAIN_UNREAD | maintainunread attribute | false | Missing in DXL if checked |
| Advanced Tab | Replicate Unread Marks | REPLICATE_UNREAD | replicateunread attribute | all | Use specific setter, <code>setReplicateUnreadSetting(UnreadReplicationSetting)</code> , to set or unset. |
| Advanced Tab | Optimize Document Table Map | OPTIMIZE_DOC_MAP | optimizetab ebimap attribute | true | Missing in DXL if not checked |
| Advanced Tab | Don't Overwrite Free Space | DONT_OVERWRITE_FREE_SPACE | overwritefree space attribute | false | Missing in DXL if checked |
| Advanced Tab | Maintain Last Accessed | MAINTAIN_LAST_ACCESSED | savelastaccessed attribute | true | Missing in DXL if not checked |
| Advanced Tab | Disable Transaction Logging | DISABLE_TRANSACTION_LOGGING | logtransactions attribute | false | Missing in DXL if checked |

| | | | | | |
|--------------|--|-------------------------------|------------------------------------|-------|---|
| Advanced Tab | Don't Support Special Response Hierarchy | NO_SPECIAL_RESPONSE_HIERARCHY | allowspecial hierarchy attribute | false | Missing in DXL if not checked |
| Advanced Tab | Use LZ1 Compression | USE_LZ1 | uselz1 attribute | true | Missing in DXL if not checked |
| Advanced Tab | Don't Allow Headline Monitoring | NO_HEADLINE_MONITORING | allowheadline monitoring attribute | false | Missing in DXL if not checked |
| Advanced Tab | Allow More Fields | ALLOW_MORE_FIELDS | increase max fields attribute | true | Missing in DXL if not checked |
| Advanced Tab | Support Response Thread Hierarchy | SUPPORT_RESPONSE_THREADS | supportresp thread attribute | true | Missing in DXL if not checked |
| Advanced Tab | Don't Allow Simple Search | NO_SIMPLE_SEARCH | nosimple search attribute | true | Missing in DXL if not checked |
| Advanced Tab | Compress Design | COMPRESS_DESIGN | compress design attribute | true | Missing in DXL if not checked |
| Advanced Tab | Compress Data | COMPRESS_DATA | compress data attribute | true | Missing in DXL if not checked |
| Advanced Tab | Disable Auto-Update Views | NO_AUTO_VIEW_UPDATE | noauto view update attribute | true | Missing in DXL if not checked |
| Advanced Tab | Disable Export of View Data | NO_EXPORT_VIEW | \$DisableExport in Icon | 1 | Missing if not checked |
| Advanced Tab | Allow Soft Deletions | ALLOW_SOFT_DELETE | allowsoft deletion attribute | true | Missing in DXL if not checked |
| Advanced Tab | Permanently Delete Documents After | SOFT_DELETE_EXPIRY | softdeletion expiring attribute | 48 | Use <code>setSoftDeletionsExpireIn(int)</code> to set. If integer.MIN_VALUE is passed, soft deletions are disabled and this attribute reset to 48. |
| Advanced Tab | Limit \$UpdatedBy | MAX_UPDATED_BY | maxupdated by entries attribute | 32 | Use <code>setMaxUpdatedBy(int)</code> with a value greater than 0. If 0 or less, the attribute is removed. |
| Advanced Tab | Limit \$Revisions | MAX_REVISIONS | maxrevision entries attribute | 32 | Use <code>setMaxRevisions(int)</code> with a value greater than 0. If 0 or less, the attribute is removed. |
| Advanced Tab | Allow DAS | ALLOW_DAS | \$AllowRESTDbAPI in Icon | 1 | 0 = NONE, 1 = VIEWS, 2 = VIEWSANDDOCUMENTS Database Property identifies if it's 1 or 2. Use <code>getDasMode</code> to get specific mode, also accessible directly from <code>IconNote</code> class. Use <code>setDasMode(DASMode)</code> to set. Setter has been in <code>IconNote</code> since ODA 4.1.0 but was only added to <code>DatabaseDesign</code> class in 4.3.0. |
| Not Exposed | DAOS | DAOS_ENABLED | \$Daos in Icon | 1 | Must be set via server console command |
| Not Exposed | 16Mb Summary Fields | DOCUMENT_SUMMARY_16MB | \$LargeSummary in Icon | 1 | FP8+, must be set via server console command |

Setting Database Properties

To set database properties that only take a boolean value, create a `DbProperties` Map and pass it into `setDatabaseProperties()` method. Properties that cannot be set or properties that have a specific setter will throw a runtime error with the relevant message. After setting any database properties you need to call `DatabaseDesign.save()`. If items in the `Icon` note have been updated, that will automatically get saved.

Example

```
Session s = Factory.getSession();

Database db = s.getDatabase("", "yourdb.nsf");
DatabaseDesign dbDesign = db.getDesign();

Map<DbProperties, Boolean> settings = new HashMap<DbProperties, Boolean>();
settings.put(DbProperties.DONT_MAINTAIN_UNREAD, false); // note: will 'check' the property
settings.put(DbProperties.ALLOW_STORED_FORMS, false); // note: will 'uncheck' the property

dbDesign.setDatabaseProperties(settings);
dbDesign.save();
```

The Icon note appears to get cached by the session. So there is no point calling the relevant getters to check if a database property like \$AllowRESTDbAPI has been updated - you'll get the value from the start of the request. If you want to check, run a separate subsequent request to the server.

Missing in DXL if **not** checked