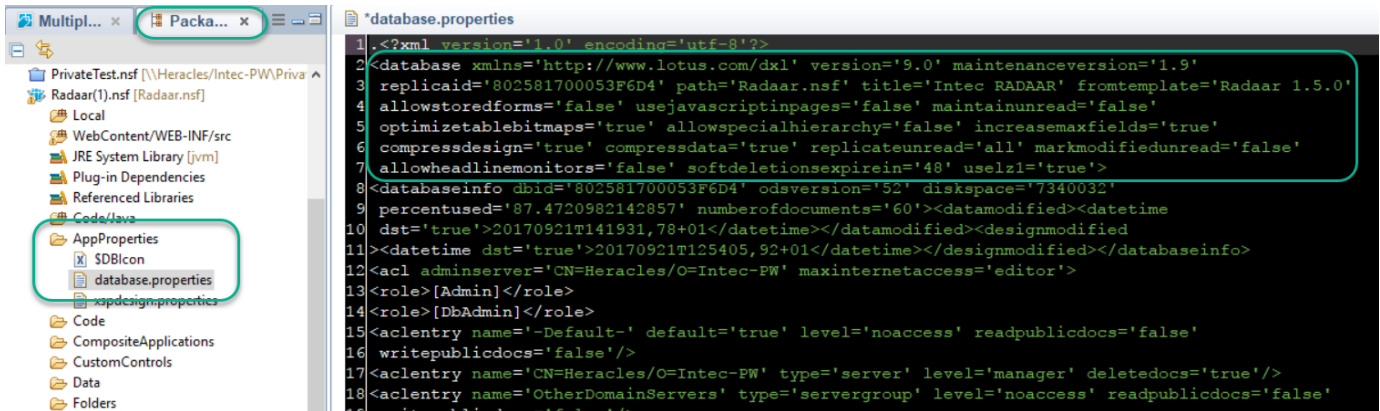


Managing Database Properties

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	usejavascriptinpages attribute	false	Missing in DXL if checked
Basics Tab	Require SSL	REQUIRE_SSL	requiressl attribute	true	Missing in DXL if not checked
Basics Tab	Don't Allow URL Open	NO_URL_OPEN	nourlopen attribute	true	Missing in DXL if not checked
Basics Tab	Enable Enhanced HTML Generation	ENHANCED_HTML	\$AllowPost8HTML item in Icon	1	Missing if not checked
Basics Tab	Don't Allow ICAA	BLOCK_ICAA	\$DisallowOpenInNBP item in Icon	1	Missing if not checked
Basics Tab	Disable Background Agents	DISABLE_BACKGROUND_AGENTS	allowbackgroundagents attribute	false	Missing if not checked
Basics Tab	Allow Stored Forms	ALLOW_STORED_FORMS	allowstoredforms attribute	false	Missing if checked
Basics Tab	Display Images After Loading	DEFER_IMAGE_LOADING	imageloadsdeferred attribute	true	Missing in DXL if not checked

Basics Tab	Allow Document Locking	ALLOW_DOC_LOCKING	allowdocumentlocking attribute	true	Missing in DXL if not checked
Basics Tab	Inherit OS Theme	INHERIT_OS_THEME	inheritostheme 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	\$LaunchXPageRunOnServer in 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	optimizetablebitmap 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	save last accessed 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	allowspecialhierarchy 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	allowheadlinemonitoring 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	supportrespthread attribute	true	Missing in DXL if not checked
Advanced Tab	Don't Allow Simple Search	NO_SIMPLE_SEARCH	nosimplesearch attribute	true	Missing in DXL if not checked
Advanced Tab	Compress Design	COMPRESS_DESIGN	compressdesign attribute	true	Missing in DXL if not checked
Advanced Tab	Compress Data	COMPRESS_DATA	compressdata attribute	true	Missing in DXL if not checked
Advanced Tab	Disable Auto-Update Views	NO_AUTO_VIEW_UPDATE	noautoviewupdate 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	allowsoftdeletion attribute	true	Missing in DXL if not checked
Advanced Tab	Permanently Delete Documents After	SOFT_DELETE_EXPIRY	softdeletionexpiryin attribute	48	Use <code>setSoftDeletionsExpireIn(int)</code> to set. If integer. <code>MIN_VALUE</code> is passed, soft deletions are disabled and this attribute reset to 48.
Advanced Tab	Limit \$UpdatedBy	MAX_UPDATED_BY	maxupdatedbyentries 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	maxrevisionentries 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