BL Changes

DCA Changes

1.Primary Keys

Use the UUIDs as foreign keys.

Table N°	Table Name	Foreign Key
5	[Items]	[Items]UUID_site
5	[Items]	[Items]UUID_institute
6	[Featured Items]	[Featured Items]UUID_items
7	[Texts]	[Texts]UUID_items
7	[Texts]	[Texts]UUID_titleAuthority
8	[BibRef]	[BibRef]UUID_items
8	[BibRef]	[BibRef]UUID_bibliography
9	[Bibliography]	[Bibliography]UUID_scholars
10	[Item Type]	[Item Type]UUID_items
10	[Item Type]	[Item Type]UUID_concordance
11	[Condition Check]	[Condition Check]UUID_items
12	[Images]	[Images]UUID_site
12	[Images]	[Images]UUID_items
12	[Images]	[Images]UUID_texts
12	[Images]	[Images]UUID_procedure
15	[Form]	[Form]UUID_concordance
15	[Form]	[Form]UUID_items
17	[Conserve Log]	[Conserve Log]UUID_items
19	[Catalogue Entry]	[Catalogue Entry]UUID_items
19	[Catalogue Entry]	[Catalogue Entry]UUID_texts
19	[Catalogue Entry]	[Catalogue Entry]UUID_catalogue
21	[Attachments]	[Attachments]UUID_items
24	[Subject]	[Subject]UUID_items
24	[Subject]	[Subject]UUID_concordance
24	[Subject]	[Subject]UUID_publicityImages
25	[Languages And Scripts]	[Languages And Scripts]UUID_items
25	[Languages And Scripts]	[Languages And Scripts]UUID_concordance
29	[Gazateer]	[Gazateer]UUID_site
32	[Previous Repair]	[Previous Repair]UUID_conditionCheck
33	[Biological Damage]	[Biological Damage]UUID_conditionCheck
34	[Procedure]	[Procedure]UUID_items
36	[Publicity Images]	[Publicity Images]UUID_items
36	[Publicity Images]	[Publicity Images]UUID_institute
38	[Subsites]	[Subsites]UUID_site
40	[PeopleLink]	[PeopleLink]UUID_items

Table N°	Table Name	Foreign Key
40	[PeopleLink]	[PeopleLink]UUID_people
43	[Orthography]	[Orthography]UUID_items
43	[Orthography]	[Orthography]UUID_concordance
45	[CIN]	[CIN]UUID_images
46	[CIN Transcription]	[CIN Transcription]UUID_cin
48	[PlacesLink]	[PlacesLink]UUID_items
48	[PlacesLink]	[PlacesLink]UUID_places
53	[SiteType]	[SiteType]UUID_site
54	[Polygon]	[Polygon]UUID_site
57	[OrderItems]	[OrderItems]UUID_items
57	[OrderItems]	[OrderItems]UUID_order
58	[Collections]	[Collections]UUID_institute
60	[Validation_Log]	[Validation_Log]UUID_site
61	[Validation_Log_Record]	[Validation_Log_Record]UUID_validationLog

2. Links

Rename links between tables. With ORDA it's mandatory to name them to speed up the code.

Table	1	N	Related Table
[Items]	site	items	[Site]
[Items]	institute	items	[Institute]
[Featured Items]	item	featuredItems	[Items]
[Texts]	item	texts	[Items]
[Texts]	titleAuthority	texts	[Title Authority]
[BibRef]	bibliography	bibRefs	[Bibliography]
[BibRef]	item	bibRefs	[Items]
[Bibliography]	scholar	bibliographies	[Scholars]
[Item Type]	item	itemsType	[Items]
[Item Type]	concordance	itemsType	[Concordance]
[Condition Check]	item	conditionsCheck	[Items]
[Images]	text	images	[Texts]
[Images]	item	images	[Items]
[Images]	site	images	[Site]
[Images]	procedure	images	[Procedure]
[Form]	item	forms	[Items]
[Form]	concordance	forms	[Concordance]
[Conserve Log]	item	conserveLogs	[Items]
[Catalogue Entry]	text	cataloguesEntry	[Texts]
[Catalogue Entry]	catalogue	cataloguesEntry	[Catalogue]
[Catalogue Entry]	item	cataloguesEntry	[Items]
[Attachments]	item	attachments	[Items]
[Subject]	item	subjects	[Items]
[Subject]	concordance	subjects	[Concordance]
[Subject]	publicityImage	subjects	[Publicity Images]

Table	1	N	Related Table
[Languages And Scripts]	item	languagesAndScripts	[Items]
[Languages And Scripts]	concordance	languagesAndScripts	[Concordance]
[Gazateer]	site	gazateers	[Site]
[Previous Repair]	conditionCheck	previousRepairs	[Condition Check]
[previousRepairs]	conditionCheck	biologicalDamages	[Condition Check]
[Procedure]	item	procedures	[Items]
[Publicity Images]	item	publicityImages	[Items]
[Publicity Images]	institute	publicityImages	[Institute]
[Subsites]	site	subsites	[Site]
[PeopleLink]	item	peopleLinks	[Items]
[PeopleLink]	people	peopleLinks	[People]
[Orthography]	item	orthographies	[Items]
[Orthography]	concordance	orthographies	[Concordance]
[CIN]	image	cins	[Images]
[CIN Transcription]	cin	cinTranscriptions	[CIN]
[PlacesLink]	item	placesLink	[Items]
[PlacesLink]	place	placesLink	[Places]
[SiteType]	site	siteTypes	[Site]
[Polygon]	site	polygons	[Site]
[OrderItems]	order	orderItems	[Order]
[OrderItems]	item	orderItems	[Items]
[Collections]	institute	collections	[Institute]
[Validation_Log]	site	gazateers	[Site]
[Validation_Log_Record]	validationLog	validationLogsRecords	[Validation_Log]

3. Indexes

Set the correct index type instead of the automatic index.

Field Name	Type of index
[xNumber]FileNumber	B-Tree
[xNumber]FieldNumber	Cluster
[xNumber]Identifier	Cluster
[Items]Pressmark	B-Tree
[Items]site id	Cluster
[Items]Known as	Cluster
[Items]seal	Cluster
[Items]lib sort no	Cluster
[Items]Modified Person	Cluster
[Items]Modified Date	Cluster
[Items]Stein site no	Cluster
[Items]Provenance Value	Cluster
[Items]Institute id	Cluster
[Items]input person	Cluster
[Items]input date	Cluster
[Items]Subsite id	Cluster
[Items]ckd date	Cluster
[Items]prev chk date	Cluster

Field Name	Type of index
[Items]SyncKey	B-Tree
[Items]Usage Value	Cluster
[Items]overall size height	Cluster
[Items]overall size width	Cluster
[Items]Long Min	Cluster
[Items]Long Max	Cluster
[Items]Lat min	Cluster
[Items]Lat Max	Cluster
[Items]other comments	Cluster
[Items]SponsorCost	Cluster
[Items]restriction status	Cluster
[Items]Illustrated	Cluster
[Items]Frameset Identifier	Cluster
[Items]Palaeographical Project	Cluster
[Items]Has Associated Images	Cluster
[Items]Sponsored	Cluster
[Items]Chopped	Cluster
[Items]Fibre Analysis	Cluster
[Items]Site Name	Cluster
[Items]Ready For Digitisation	Cluster
[Items]collection name	Cluster
[Items]institute Name Value	Cluster
[Items]Derived_Record_ID	Cluster
[Items]Derived_Record	Cluster
[Items]Derived_Record_Source	Cluster
[Items]Derived_Record_Date	Cluster
[Items]Ready To Sponsor	Cluster
[Featured Items]Pressmark	B-Tree
[Texts]Pressmark	B-Tree
[Texts]Pressmark and section	B-Tree
[Texts]Title Value	Cluster
[Texts]dated	Cluster
[Texts]year	Cluster
[Texts]year name	Cluster
[Texts]input person	Cluster
[Texts]input date	Cluster
[Texts]Modified Person	Cluster
[Texts]Modified Date	Cluster
[Texts]section	Cluster
[Texts]sort no	Cluster
[Texts]SyncKey	B-Tree
[Texts]reuse Giles No	Cluster
[BibRef]OLDPressmark and section	B-Tree
[BibRef]Short ref	Cluster
[BibRef]Pressmark	B-Tree
[BibRef]SyncKey	B-Tree
[Bibliography]Short ref	B-Tree
[Bibliography]Author	Cluster
[Bibliography]Location	Cluster
[Bibliography]Author2	Cluster
[Bibliography]Author3	Cluster
[Bibliography]Location2	Cluster
[Bibliography]Input Person	Cluster

Field Name	Type of index
[Bibliography]Input Date	Cluster
[Bibliography]Modified Person	Cluster
[Bibliography]Modified Date	Cluster
[Bibliography]SyncKey	B-Tree
[Bibliography]XMLRecordAsText	Cluster
[Item Type]Pressmark	B-Tree
[Item Type]Item Type Value	Cluster
[Item Type]SyncKey	B-Tree
[Condition Check]Pressmark	B-Tree
[Condition Check]Input date	Cluster
[Condition Check]SyncKey	B-Tree
[Images]Pressmark and section	Cluster
[Images]Reprographics no	Cluster
[Images]Pressmark	Cluster
[Images]Digital image name	B-Tree
[Images]Photo date	Cluster
[Images]PlaceName	Cluster
[Images]Image Order No	Cluster
[Images]siteID	Cluster
[Images]Thumbnail Type	Cluster
[Images]Digitised for	Cluster
[Images]Digitiser	Cluster
[Images]Digitised Date	Cluster
[Images]Ready for Manipulation	Cluster
[Images]Manipulated by	Cluster
[Images]Manipulated date	Cluster
[Images]Manipulation Completed	Cluster
[Images]Stitched	Cluster
[Images]Checked by	Cluster
[Images]Checked Date	Cluster
[Images]SyncKey	B-Tree
[Images]DBSiteID	Cluster
[Images]latitude	Cluster
[Images]longitude	Cluster
[Images]Linked DIN	Cluster
[Images]Procedure_id	Cluster
[Images]Externally_Linked_Image	Cluster
[Title Authority]Title Value	B-Tree
[Title Authority]Taisho	Cluster
[Title Authority]Synckey	B-Tree
[Title Authority]Modified Person	Cluster
[Title Authority]Modified Date	Cluster
[Title Authority]Ch pinyin	Cluster
[Title Authority]Jap romanji	Cluster
[Title Authority]Ru roman	B-Tree
[Title Authority]En roman	B-Tree
[Title Authority]Ger roman	B-Tree
[Title Authority]Fr roman	Cluster
[Title Authority]Ko roman	Cluster
[Form]Pressmark	B-Tree
[Form]Form Value	Cluster
[Form]SyncKey	B-Tree
[Scholars]Surname	B-Tree

Field Name	Type of index
[Scholars]Firstname	Cluster
[Scholars]Author	B-Tree
[Scholars]Mail address C	Cluster
[Scholars]max length	Cluster
[Scholars]SyncKey	B-Tree
[Conserve Log]Pressmark	B-Tree
[Conserve Log]Input date	Cluster
[Conserve Log]SyncKey	B-Tree
[Conserve Log]Conservator	Cluster
[Conserve Log]Conserved start date	Cluster
[Conserve Log]Conserved end date	Cluster
[Conserve Log]Checked date	Cluster
[WebUser]Surname	B-Tree
[WebUser]UniqueID	B-Tree
[WebUser]TemporaryUser	Cluster
[Catalogue Entry]Pressmark and section	B-Tree
[Catalogue Entry]Accreditation	Cluster
[Catalogue Entry]ShortRef	Cluster
[Catalogue Entry]Stein site no	Cluster
[Catalogue Entry]catalogue no	Cluster
[Catalogue Entry]lib sort no	Cluster
[Catalogue Entry]CatalogueEntryID	B-Tree
[Catalogue Entry]PressMark	B-Tree
[Catalogue Entry]SyncKey	B-Tree
[Catalogue Entry]Catalogue Type	Cluster
[User]Username	B-Tree
[User]UserID	B-Tree
[User]Department	Cluster
[Attachments]Pressmark	B-Tree
[Sync_Journal]id	B-Tree
[Sync_Journal]TableNumber	Cluster
[Sync_Journal]SyncKey	Cluster
[Sync_Journal]DateCreated	Cluster
[Sync_Journal]TimeCreated	Cluster
[Sync_Journal]DateSynced1	Cluster
[Sync_Journal]Result1	Cluster
[Sync_Journal]DateSynced2	Cluster
[Sync_Journal]Result2	Cluster
[Sync_Journal]DateSynced3	Cluster
[Sync_Journal]Result3	Cluster
[Sync_Journal]DateSynced4	Cluster
[Sync_Journal]Result4	Cluster
[Sync_Journal]DateSynced5	Cluster
[Sync_Journal]Result5	Cluster
[Sync_Journal]DateSynced6	Cluster
[Sync_Journal]Result6	Cluster
[Sync_Journal]DateSynced7	Cluster
[Sync_Journal]Result7	Cluster
[Sync_Journal]DateSynced8	Cluster
[Sync_Journal]Result8	Cluster
[Sync_Journal]DateSynced9	Cluster
[Sync_Journal]Result9	Cluster
[Sync_Journal]DateSynced10	Cluster

Field Name	Type of index
[Sync_Journal]Result10	Cluster
[Sync_Journal]DateSynced11	Cluster
[Sync_Journal]Result11	Cluster
[Sync_Journal]DateSynced12	Cluster
[Sync_Journal]Result12	Cluster
[Site]Place Name Value	B-Tree
[Site]site id	B-Tree
[Site]Long min	Cluster
[Site]Long Min Decimal	Cluster
[Site]Long Max Decimal	Cluster
[Site]Lat Max Decimal	Cluster
[Site]Lat Min Decimal	Cluster
[Subject]Pressmark	B-Tree
[Subject]Subject Value	Cluster
[Subject]SyncKey	B-Tree
[Subject]PublicityImagesID	Cluster
[Languages And Scripts]Pressmark	B-Tree
[Languages And Scripts]Language Value	Cluster
[Database Sites]DB Site ID	B-Tree
[Photographs]Site id	Cluster
[Photographs]Pressmark	B-Tree
[Map]Long min	Cluster
[Map]Digital image name	B-Tree
[Gazateer]site id	B-Tree
[Gazateer]name	Cluster
[Gazateer]Year Start	Cluster
[Gazateer]Year End	Cluster
[Institute]Institute id	B-Tree
[Institute]Institute name	B-Tree
[Concordance]Unique Identifier	B-Tree
[Concordance]Field Type	Cluster
[Concordance]English	B-Tree
[Concordance]Ch pinyin	Cluster
[Concordance]Jap romanji	Cluster
[Concordance]Ru roman	Cluster
[Concordance]En roman	B-Tree
[Concordance]Ger roman	B-Tree
[Concordance]Fr roman	Cluster
[Concordance]Ko roman	Cluster
[Previous Repair]UniqueID	B-Tree
[Biological Damage]UniqueID	B-Tree
[Procedure]Pressmark	Cluster
[Procedure]Procedure	Cluster
[Procedure]Procedure_id	B-Tree
[SutraSponsors]Date	Cluster
[Publicity Images]publicityImagesID	B-Tree
[Publicity Images]Digital Image Name	B-Tree
[Publicity Images]Pressmark	Cluster
[Publicity Images]Institute ID	Cluster
[Publicity Images]URLUniqueID	B-Tree
[Whats New]Synckey	Cluster
[Whats New]Order Number	B-Tree
[Whats New]Include_WhatsNew	Cluster

Field Name	Type of index
[Whats New]Include_WhatsOn	Cluster
[Subsites]Site id	Cluster
[Subsites]Subsite Value	B-Tree
[Catalogue]CatalogueID	B-Tree
[Catalogue]Shortref	B-Tree
[Catalogue]SyncKey	B-Tree
[PeopleLink]PeopleLinkID	B-Tree
[PeopleLink]Pressmark	Cluster
[PeopleLink]Name as Appears	Cluster
[PeopleLink]Standard Name	Cluster
[People]PeopleID	B-Tree
[People]Standard Name	B-Tree
[Orthography]Pressmark	Cluster
[Orthography]Orthography value	Cluster
[Sync_Journal_In]TableNumber	Cluster
[Sync_Journal_In]Synckey	Cluster
[Sync_Journal_In]DateCreated	Cluster
[Sync_Journal_In]DateSynced	Cluster
[CIN]CIN	B-Tree
[CIN]DIN	Cluster
[CIN]CINID	B-Tree
[CIN]ImageSyncKey	Cluster
[CIN Transcription]CINID	B-Tree
[Places]Standard Name	B-Tree
[PlacesLink]Pressmark	B-Tree
[PlacesLink]Standard Name	Cluster
[ServerHealth]ID	Cluster
[ServerHealth]DateTime	B-Tree
[EmailEvent]Name	B-Tree
[EmailEvent]Next Scheduled Execution	Cluster
[SummaryReportData]Report	Cluster
[SiteType]SyncKey	B-Tree
[SiteType]Site ID	B-Tree
[Order]Order Number	B-Tree
[Order]Order Date	Cluster
[Order]Order Generated	Cluster
[OrderItems]Pressmark	Cluster
[Validation_Log]Vaildation_Log_ID	B-Tree
[Validation_Log_Record]Vaildation_Log_ID	Cluster

4. Obsolete Commands

List of methods that have been changed:

- lang_Language_Delete *(Project Method)*
- lang_Language_Save *(Project Method)*
- lang_Language_SaveSettings *(Project Method)*
- lang_Struct_ArrayToResources *(Project Method)*
- lang_TableField_Titles_Set *(Project Method)*
- [xDialog].lang_ResEdit.btn_Res_Delete *(Object Method)*
- [xDialog].lang_ResEdit.Button1 *(Object Method)*

- [xDialog].lang_Translations.btn_menus_Save *(Object Method)*
- [xDialog].lang_Translations.btn_menus_Save1 *(Object Method)*
- [xDialog].lang_Translations.btn_menus_Save2 *(Object Method)*

5. Semaphores

Processes need some time to access some variables.
We need to manage these processes.
In the database they do not respect the best practices.

List of methods that have been changed:

- A4D_Startup *(Project Method)*
- A4D_WriteToConsole *(Project Method)*
- A4D_Console *(Form Method)*

6. _4D Get rotated images – optimization

Optimize the method so that it makes only one call to the server to return an image instead of 4 calls.

List of methods that have been created:

- __4DGetRotatedImagePS *(Project Method)*

List of methods that have been changed:

- A4D__GetRotatedImage *(Project Method)*

7. Taking care of queries

List of methods that have been changed:

- pItemTypeStatsPublicII *(Project Method)*
- plangScriptStatsPublic *(Project Method)*

8. Current date and current time using *

On the client/server context, if you use the * you don't get the date and time of the local machine but of the server.
List of methods that have been changed:

- emailTester *(Project Method)*
- mUpdateSummaryReportData *(Project Method)*
- pRunDataValidation *(Project Method)*
- pUpdateSochRecords *(Project Method)*
- sync_AddIncomingJournalRecord *(Project Method)*
- sync_Daemon *(Project Method)*
- sync_SendJournalRecord *(Project Method)*
- UpdateSyncStatus *(Project Method)*
- Util_Seconds *(Project Method)*
- xApp_InitFirst *(Project Method)*

- [Catalogue Entry] Trigger
- [Concordance] Trigger
- [Items] Trigger
- [People] Trigger
- [Places] Trigger
- [Procedure] Trigger
- [Scholars] Trigger
- [SutraSponsors] Trigger
- [Title Authority] Trigger
- [ImagesBatchADD].3D Button1 *(Object Method)*
- [Bibliography].View.Button3 *(Object Method)*
- [CIN].CINInput.Completed *(Form Method)*
- [CIN].CINInput.Button2 *(Object Method)*
- [EmailEvent].Input *(Form Method)*
- [Featured Items].Included.S4_Field *(Object Method)*
- [Featured Items].Input.Publish *(Object Method)*
- [Whats New].Input *(Form Method)*

9. Viscosity

List of methods that have been changed:

- chopper_submitData *(Project Method)*
- m_ChangeMSNo *(Project Method)*
- pCataloguingItemsAdded *(Project Method)*
- pItemsBatchAddAction5 *(Project Method)*
- pItemsBatchAddAction6 *(Project Method)*
- pModIndexII *(Project Method)*
- pModItemsII *(Project Method)*
- pModTextsII *(Project Method)*
- pRunDataValidation *(Project Method)*
- pUpdateSummaryData *(Project Method)*
- ServerHealth_Create *(Project Method)*
- ws_rtnRmtImageCount *(Project Method)*
- xApp_CrtDefRecs *(Project Method)*
- xApp_PreCacheData *(Project Method)*
- zExportValidatedItemRecords *(Project Method)*
- zUsersAndGroups *(Project Method)*
- zzzzzzImportOldChopperData *(Project Method)*
- importUpdateChoice.Scrollable Area *(Object Method)*
- [Images].ImagesInput.Button3 *(Object Method)*
- [Images].ImagesInputFormItemOrText.Button3 *(Object Method)*
- [Items].DataValidationFields.ConcordancePlaceName *(Object Method)*
- [Items].DataValidationFields.ConcordancePlaceName2 *(Object Method)*

- [Items].Itemsinput.Variable1 *(Object Method)*
- [Items].Itemsinput.ConcordancePlaceName *(Object Method)*
- [Items].Itemsinput.ConcordancePlaceName2 *(Object Method)*
- [Procedure].Input.Procedure_id *(Object Method)*
- [Procedure].Input *(Form Method)*
- [Publicity Images].PublicityImagesInput *(Form Method)*
- [SutraSponsors].Input.Active *(Object Method)*
- [Texts].TextsInput *(Form Method)*
- [Texts].TextsInputOld *(Form Method)*

10. Plugins – Internet Commands

4D Internet Command is currently used to send emails.

It's not obsolete but v18 SMTP Transport is a new approach to sending emails.

List of methods that have been changed:

- A4D_SendMail *(Project Method)*
- HTMLMail_send *(Project Method)*
- sendMailSynchro *(Project Method)*
- WEB_SendMail *(Project Method)*

Save Users List

When the server is launched, a process is launched.

This Process will take a copy of the users and save it in a blob field every day between 2am and 3 am. And at each startup of the server, it will use this copy of the users.

Field that has been created:

- [xPref]usersAndGroups

List of methods that have been created:

- launchSaveUsersProcess *(Project Method)*
- saveCurrentUsersAndGroups *(Project Method)*

List of methods that have been created:

- On StartUp *(Database Method)*

Bulk edit

Issue:Fix issue with the images locked records.

Fix: Set relation one to many between [Images] and [Items] to manual.

Issue: Import Update Data – error on the listbox when selecting the fields.
Fix: Method that has been changed:

- UpdateItemsRebuildPreview