

# Installing the Observatory Database

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## Server Selection and Configuration

This application requires a Domino 4.6.2 or later server. If you are intending to support large numbers (500+) of projects, we suggest you consider a fast dedicated server for the application.

This is an agent driven application. As the database grows, the agents will take longer to run. Configure the server to allow unlimited run times for agents to prevent them be stopped by the agent manager.

These run time settings are found in the Name and Address Book, Server Document, Agent Manager Settings. The specific parameters are: "Max LotusScript/Java execution time" for daytime and nighttime operation. These should be set at least 120 minutes, but may need to be longer depending upon database size.

As the system runs, it will send you messages showing you the actual run times. After the database has reached its mature size, you will be able to adjust the server parameters to more appropriate values.

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## Installation Process

Review the *ReadObs* file in the \OBS directory on the distribution CD!

Before beginning the installation process, you should create an Notes ID that will be used for the Observatory. This ID will be used to sign the observatory agents. This can be the same ID you have used for Project Gateway.

Why? When any Domino server agent issues email, the "From" address of the email is the ID which *signs* the agent. Thus, you could sign the database with your personal ID, but that would cause all the email to look like it came from you! You could sign it with the Server ID, but this will make the mail appear to come from the server. When people erroneously reply to the messages, as some undoubtedly will, there is no place for the mail to go, because the server does not have a mailbox.

So, you should create a new ID for this purpose. Give this ID an appropriate name such as "Observatory Database" so that users will recognize it when they see it as a "From" address in their mailboxes.

The ID should be given all ECL permissions.

The ID could have an "out of office" response programmed into its mailbox.

## Creating the database on the server

1. Copy the distribution database template "POBST200.NTF" (the number may change from release to release) from the \OBS\OBSDB directory on the distribution CD to your local Notes\Data directory.
2. Using Windows Explorer, change the file attributes on this file from Read-only to Read Write. Since the file is stored on a CD, it is Read-only. But in order to modify the template, now or in the future, you must have Read/Write access. Select the file. Select the command "File Properties" from the Explorer menu, and uncheck the Read-only checkbox.
3. Switch ID to your new Observatory ID.
4. Sign the template with the Observatory ID.

Notes 4. Use the Server Administration command: Tools, Server Administration, Database Tools, Sign a Database, Sign Every Design Note. You will have to enter the file name of the template (POBST200.NTF) since only databases show in the list. Depending upon system performance and network speed, this operation can take several minutes. It will always take at least a minute.

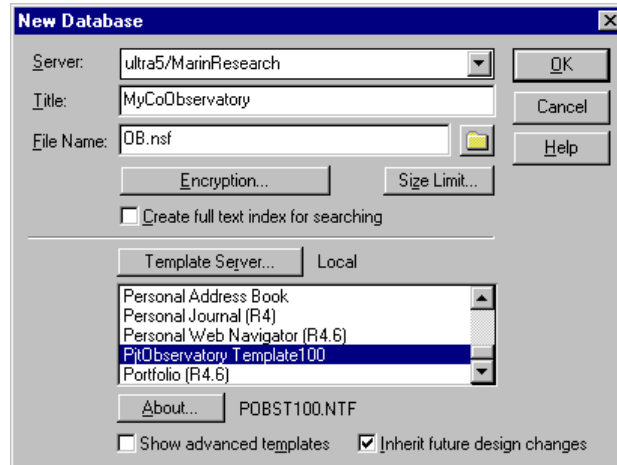
*If the signing process appears to complete instantaneously, then you have pressed the "Done" button rather than the "Sign" button on the form. This is a very common problem due to the design of the form. Go back and do it again.*

When done, look at the design tab of any of the agents in the template. It should show that the "last modified by" ID is your Observatory ID.

In Notes 5, the Sign Database command is located in the Administrator client.

5. Create a new database from this template. Note that the template name is PjtObservatory Template200. (The number at the end may change from release to release.)

**Select File, Database, New...**



**Server:** Specify the intended server.

**Title:** - We suggest something easy to recognize like "MyCo Observatory"

**Filename:** - Choose a short file name such as OB.NSF. Do not include spaces or punctuation.

**Note:** Put the database into the root of the data directory of the server. If you must put it into a subdirectory, ensure that the name of the subdirectory name does not contain any spaces or other characters that are used in URL's such as \_ + & .

**Size:** - Set the database size to 4 Gigabytes.

## Access Control

The Observatory design specifies 4 roles which should be assigned to appropriate.

[OBSADMIN] - used to give administrative power.

[OBSAGENT] - used for agents to allow them to modify all documents. The observatory ID must have this role.

[OBSANALYST] - used to assign limited administrative power for classification.

[OBSEXEC] - used to provide read access to all documents. This should be restricted to executives with unlimited "need to know" authority. Will override Read Access limitations set on individual reports.

Open the database on the server, go to the access control list and add the special observatory ID to the access control list as Manager. Assign it the roles of [OBSADMIN] and [OBSAGENT].

Add your own personal ID to the access control list with the role of [OBSADMIN].

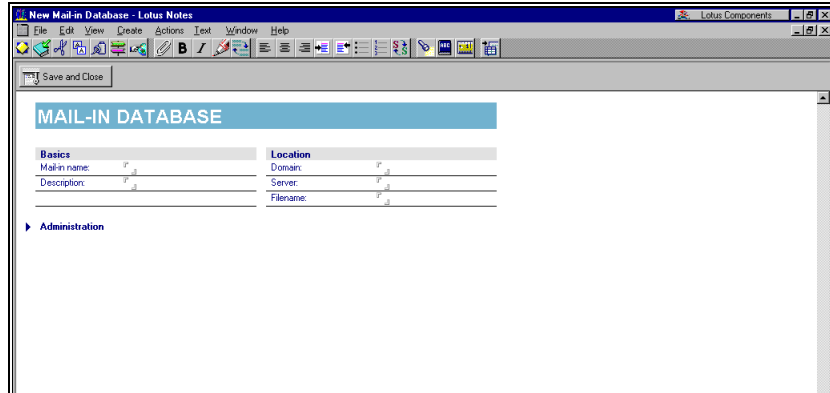
## Mail In Database Setup

Using your normal Administration ID, get access to the master name and address book.

Display the section "Mail In Databases"

Press the view button "New Mail In Database"

Fill in the Mail In Database form



MAIL-IN DATABASE	
<b>Basics</b>	<b>Location</b>
Mail-in name: _____	Domain: _____
Description: _____	Server: _____
	Filename: _____
▶ Administration	

**Mail in Name:** Create an easily remembered name for this database. Users will have to use type this name when setting up all the systems that feed it, so the name should be a simple one.

**Description:** Enter a description so that others will know that this is an project management database.

**Domain:** Enter the domain of the observatory server.

**Server:** Enter the server name in the domain

**Database:** Enter the filename of the database. The file name should be entered exactly as it is displayed on the database properties, information tab for the observatory database. If the database is in a subdirectory of the server's data directory, then the filename should be preceded by the subdirectory structure.

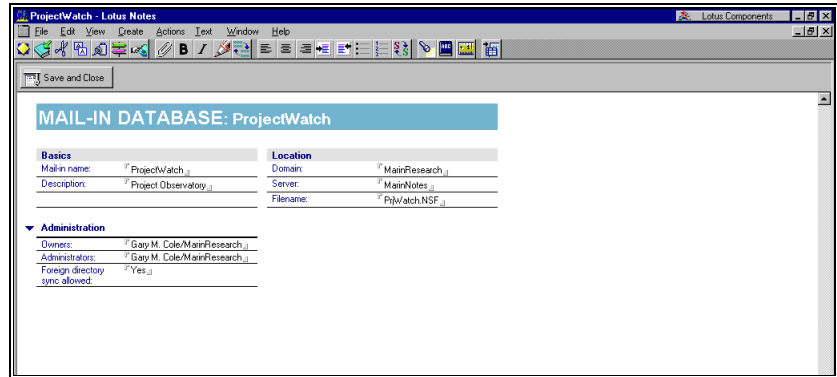
### Administration

**Owners:** Enter your ID.

**Administrators:** Enter the appropriate administrator ID.

**Foreign Directory Sync Allowed:** Enter Yes. You will want to be able to accept mail from sources outside your domain, so you may need connectivity to other mail systems.

Here is an example of an observatory database at Marin Research:



## Group Setup

Mail-in Notes databases may not show up in the Notes Name and Address book when it is viewed through the MAPI system by Microsoft Project users. To get around this limitation, you should create a group in the Notes Name and Address book containing the observatory database as its only member. The group will appear in the MAPI view, even though the mail-in database will not.

## Loading Required Documents

While the observatory database is shipped as a template, you must put one document that we provide into the database that you have created.

Open the database "OBS\OBSDB\OBSXD200.NSF" from the CD.

Close the opening page to show the document list. There is only one document. Put the cursor on this document and select Edit Copy. Select File Close.

Open the observatory database. Click on the right hand panel and select the command Edit Paste. You will not see anything happen on the screen, but the document will be put into the database.

The document being loaded is the Animation Style Document which is discussed in the Customization chapter of this guide.

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## Setting up the Observatory Administration Document

The Observatory Administration Form is the control point for the entire system. You must create this document before doing anything else. Only people with the [OBSADMIN] role will be allowed to edit it thereafter.

If you are the Notes Administrator, you probably want to consult with the manager of the user organization or PMO office as to the desired settings for this form.

Before you begin, switch to your normal Notes ID that you will use as observatory administrator. Do not use the special ID created for the observatory itself.

You must manually create the Observatory Administration form.

From the menu, select **Create - Other - Administration Form**.

This will create a Observatory Administration form with default settings. Fill in the email address for the administrator and make any desired changes and save. This form must exist before the database agents are started.

After this has been created, you can reopen it by selecting the "administration" tab on the Management Navigator. You must fill in a small number of required field. The remainder are initialized with reasonable defaults.

The required fields that you must enter are "**Email Address for Observatory Administrator**" and the first two fields in the **Web Access and Email Setup** section.

The screenshot shows a Lotus Notes window titled "Project Observatory Administration Form - Lotus Notes". The main content area displays the "OBSERVATORY ADMINISTRATION FORM" with the following details:

- Name: Project Observatory
- Email Address of Administrator: \*

The "Administrative Notification" section is expanded, showing the following options:

<input type="checkbox"/> Message Agent Runs	<input type="checkbox"/> Remove and Archive Agent Runs
<input type="checkbox"/> Maintain Program or Commitment Agents Run	<input type="checkbox"/> Metrics Agent Runs
<input type="checkbox"/> Historian Agent Runs	<input type="checkbox"/> New Items Added to Worksheets
<input type="checkbox"/> Forecasting Agent Runs	<input checked="" type="checkbox"/> Any Agent Finds Errors

Below this are several expandable sections, each with a blue arrow icon:

- Web Access and Email Setup
- Report Processing
- Archiving
- History
- Reminders
- Forecasting
- Default Settings
- Recalculation Settings

At the bottom of the form, a small text box contains the message: "This is the protected text area of the form."

**Email Address for Observatory Administrator:** Select yourself, or the designated administrator for this field. This person will receive email

from the database in a variety of situations and will have edit access to this document. Other people can act as administrators providing they have the [OBSADMIN] role in the access control list.

## Administrative Notification Section

**Send Message When:** This field displays a series of checkboxes which tell system agents to send email to the administrator. For a production system, the last two choices "New Items Added to Worksheets" and "Any Agent Finds Errors" would be normally set.

For a new system, all checkboxes should be set so that the administrator is kept aware of the progress and time required for agent processing. After a few days or weeks, you will probably uncheck these options.

## Web Access and Email Setup

**Send Doclinks:** When email is generated for use by Notes clients, then doclinks will be sent to point the recipient to the report triggering the message. If you do not have any Notes mail clients, then you can set this option to No.

**Observatory URL:** When email is generated for use by browser clients, then the system will send a URL in the email to provide access to the report triggering the message. In order to enable this feature, you must enter the URL of the server.

**Related Databases:** Fill in this section to provide the URLs of the Observatory Archive, Observatory Reporter, and Project Gateway Repository Databases (if you use them). Links to these databases will appear on the Observatory Center Home page when opened by web users.

## Report Processing Section

### ***Retain all successfully processed reports ... for at least [1] days***

This parameter is used to control the behavior of the DeleteProcessedReports agent. Incoming Project Reports are kept in the database so that you can examine them, if necessary, and to give you a way of telling when a specific report arrived. There is no need for these messages beyond their diagnostic value, so they can generally be deleted quickly.

**Relay All Successfully Processed Reports:** This is an optional feature that is used when you have more than one Project Observatory. It directs the system to send all reports off to a second observatory after they have been successfully processed by this one. You would use this if you wanted to have both departmental and divisional observatories. Each department could relay all its reports to the division observatory. If you have only one observatory, you should leave this field empty.

SPECIAL REPORT HANDING:

Leave this entry blank. You do not use this with a new database, it is provided as a maintenance feature for larger sites that have to replace project reports or profiles. See instruction on the form.

## Archiving Section

The archive database will receive copies of the final report for finished project and copies of library documents that are deleted when projects, program, or organizations are deleted. This section contains the settings that direct the automatic agent to select projects for archiving. If you do not set up an Observatory Archive database at the current time, you can ignore this section.

***Server Name for Observatory Archive Database:*** This must be the same server that the Observatory Center database agents run on.

***File name:*** This must be the file name of the Observatory Archive database. Note, do not enter a file name that does not already exist! The administration form validates (when saved) that the archive is accessible.

The following options would normally be set Yes. But note that you cannot set Yes unless you have entered in the name of the Observatory Archive database in the line above.

***Enable Archiving of Project Reports when they are deleted*** (Yes/No)

***Archive associate Project Commitment Reports*** (Yes/No)

***Archive associated Library Documents*** (Yes/No)

### AUTOMATIC ARCHIVING RULES

These rules determine when projects are archived. Note that, if archiving is enabled, all projects are archived if they are marked for deletion. These settings will select projects automatically so that they can be deleted and archived without the user having to give any additional instructions.

***Enable Automatic Archiving*** (Yes/No). If you choose No, then none of the following options in this section have any effect.

***Delete/Archive projects that are "Finished"*** [...] days after last report received. Reports normally come weekly. If no report is seen for x days, and if the project is marked as "Finished" then archive and delete it. Set a large number here (5000) to effectively prevent this from happening. A typical setting would be 180 days.

***Delete/Archive projects that are "Cancelled"*** [...] days after last report received. Reports normally come weekly. If no report is seen for x days, and if the project is marked as "Cancelled" then archive and delete it. Set a large number here (5000) to effectively prevent this from happening. Generally the time to remove cancelled projects would be faster than the time to remove normal, finished projects. A typical setting would be 90 days.

***... if NO actual work, then Delete/Remove Cancelled*** projects in [...] days

This is a way of eliminating projects that are cancelled before they start more quickly. A typical setting would be 30 days.

**Delete/Archive any "abandoned projects"...** This will eliminate all projects, of any status, which have stopped reporting after a time period and whose last reported finish date has expired. Typically this would be longer than the finished or cancelled periods.

## History Section

These parameters control the behavior of the Historian and History Management Agents. In most cases, the default values should be appropriate.

**Create a new history record only if the previous report is at least [5] days old.**

Assuming that project reports are sent weekly, this will keep a history report for each week for each project. Five days is preset rather than seven days to account for the natural scatter of reporting and mail delays in a distributed system. If reports are sent daily, then you could change this parameter to 7 to maintain weekly history. Or, if your projects are all of long duration and slowly changing, you might set a longer value in this field.

**Retain all history reports for [49] days.**

Historical reports are linked to the current report. The current report displays links to the past 7 historical reports. Therefore you should usually set this parameter to be 7 times the history reporting cycle (49days=7 weeks by default.)

Reducing this value to less than 7 cycles will mean that some of the doclinks on the current reports will not be valid. This is not a major problem, but could be annoying to some users.

**After this time, save only the first report for each [Month].**

Since you will probably collect history weekly, this will remove 3/4's of the reports while retaining enough information for interested parties to explore.

**Delete all history after [365] days.**

This option will cause the system to remove all very old history reports from the database.

Commitment History [Minimum]

This controls how much history is retained for Project Commitment Reports. Since these the most common reports in the database, retaining weekly history can consume a lot of space and affect performance. There are three choices.

**None** - This prevents any history from being recorded for commitments.

**Minimum** - This allows only one history report to be retained. By doing this you allow the historical data to be collected for the graphs.

**Same of other reports** - This tells the system to maintain history in the same way as specified in the options shown above.

## Reminders Section

The automatic agent "Reminders" is controlled by the following parameters. Note, that it must be scheduled to run daily in order to correctly follow these instructions.

***Notify Project Managers [Every Friday] when no reports have been received for [7] days or other problems exist.***

The system will send the project manager (using the "email" field on the project report) a message every Friday listing those projects which have not been updated for the preset time or which have overdue work. If all projects have been updated, then no message is sent. You will get just one email listing all of your projects.

***Notify Program Managers [Every Monday] when no reports have been received for [14] days or other problems exist.***

The system will send the program manager (using the "email" field on the program report) a listing of any projects in that program which have not been updated for the specified time. This report also identifies overdue work in projects. If there are no problems to report, then no message will be sent. The program manager will get just one email which will list all of the projects.

***Notify Administrator [Every Monday] when no reports have been received from a particular source for [14] days.***

The system will send the observatory administrator a message if no reports have been received from some reporting source for an extended period. This is to alert the administrator that something is probably wrong. Perhaps a repository agent has stopped running, or an email address has been changed. So long as all report sources send at least one report within the time period, no message will be sent.

***Notify all Project Managers [Every Thursday] with the message [Please Update Your Project Reports Today]***

This will send all you project managers the reminder. If you don't want this feature active, set the period to Never. We find that this kind of weekly reminder does wonders for keeping reports updated. The project manager will get just one email listing all of the projects.

***Don't Notify about overdue/out of date work if is less than [20] hours.***

This prevents messages being generated to project and program managers about small variations in project status. Overdue work is work planned for past weeks. This work should generally be rescheduled to future weeks. Large amounts of overdue work are a sign of out of date project plans, small amounts are normal. This parameter simply sets a threshold for concern.

## Forecasting Section

### Capacity Forecasting

#### *Evaluate workload from [...] to [...] weeks*

This sets a time period for analysis. The inner limit is generally set to overlap the dashboard indicators, the outer limit is set by your planning horizon. Typical values 4 to 26.

#### *Using a [...] week moving average.*

The system computes a moving average of planned work and capacity. This makes it less sensitive to week to week variations. Using a longer period will reduce sensitivity, using a shorter one will increase it. If you set this to 1, then any overloaded week in the time window will trigger a forecast. Typical value is 4.

### Trend Forecasting

#### *Evaluate for [...] weeks into the future.*

This limits the time during which an overrun would be identified. Typical value 26.

#### *Require a minimum of [...] weeks of relevant history.*

Trend analysis requires historical data. This sets the minimum time for which report history must be available before forecasting is attempted. This amount of time must pass before a trend forecast can be issued on a new project, program or organization. Typical value is 4.

### General

#### *Remind managers every [...] days.*

A manager is notified when a forecast is issued for one of their projects, programs or organizations. They will be reminded if this amount of time passes while the forecast is in effect. Typical value is 14.

#### *Send email notifications when forecasts are created:* [Yes/No]

This will disable the sending of emails when new forecasts are created. If disabled, managers should check the forecast views from time to time.

## Default Settings Section

#### *Name of default Program:[Default Program]*

#### *Name of default Organization [Default Organization]*

This two setting serve to provide names which are used if a default program or default organization must be created to hold projects and project commitments that are not otherwise assigned.

**Full Time Equivalent Hours:** This is the default assumption about hours in a normal workweek. It is used to initialize new organization and program documents, but can be overridden on each use. The original setting of this default is 40.

These two options all you to select one of your predefined custom locations. If you don't have any custom locations, then leave these settings as NONE.

*Default location for Organizations and Members:*None

*Default location for Projects and Programs:*None

*When searching for resources, include all pending reservations:*

This should normally be Yes. Set to No only if you have a problem with people creating excessive reservations that are usually disapproved.

## Recalculation Settings Section

**Checkbox options** - These options disable certain built in optimizations. None of them are required for normal operation. Invoking these options will increase the run time of Report Processing, Maintain Programs and Maintain Commitments agents.

**Calculation Epoch** - The observatory maintains resource usage profiles by week for a ten year period. Work planned outside this period will show up in the first and last weeks of the profile. As first shipped, the epoch is set to 1996 to accomodate existing plans circa 1998 extending though 2006. This year should be as early as the start of any of your active projects. This should be changed about every two years.

The drop list for this field shows only prior years. It is calculated based upon the current year.

## Presentation Settings

These settings are used when the system is generating animations from its historical data.

**Company Name.** Enter your company name or department name. This will be included in the animation headings.

**Default availability: [40] hours per week.** This is used to compute a availability capacity when none is provided in the target organization or program.

**Update animations every [7] days.** This is the normal update frequency used to ensure that animations include the most recent data. If you create a large number of animations, you might extend this to reduce the server workload

## Skills and Metrics Interview Settings

Before any skill interviews can occur, you must define a set of custom skills using the form provided in the customization page of the database. Unless such skills exist, the next 4 settings will not have any effect.

**Conduct Project Skills Interviews:**[Yes/No]

A project interview is initiated when a new project is received. The interview questionnaire lists the resources of the project an requests that the project manager designate the most appropriate skill for each resource. The project manager makes this designation an submits the revised form. Whenever new resources are added during the life of the project, a new questionnaire is created to gather the skills used by those new resources.

In addition to the skills, the interview form allows (but does not require) the project manager to designate the location code of the project. This requires that custom locations be pre-defined.

The benefit of conducting Project Skill Interviews is that you will be able to analyse the work in the database by skill and do better staff planning and training.

***Conduct Organization Capabilities Interviews:*** [Frequency of update]. Typical value is 180 days.

This option controls the automatic capabilities interviews which are sent to the designated manager email address of each Organization Member. This questionnaire will list all possible capabilities (as defined in your custom capabilities list) and ask the person to check those which they possess. There is a second section which allows them to indicate their interest in being trained for these specific capabilities.

This is not a ranking form and it is not intended as a HR tool. The data is collected to be used to search for people with particular combinations of abilities and availability.

These questionnaires are normally re-issued periodically so that the capabilities data is up to date. By sending questionnaires we are distributing the database maintenance workload to the members.

***Action if manager email name is not provided:*** [Do not create questionnaire/Send Questionnaire to Administrator]

***Send reminder if questionnaire is not complete within [xx] days.*** Typically set to 14 days

#### METRICS INTERVIEW SETTINGS

This is used in conjunction with the Metrics Center Application of the Project Gateway Repository Suite. You do not need to use Project Gateway to use this feature, but you do need a license for the Metrics Center Application.

***Conduct Metrics Interview when projects are finished?*** Yes/No

If this is set No, then the process is never initiated. You can set it to Yes at a later time and interviews will be conducted for all finished projects in the observatory. However you will generally obtain more useful information if the interviews are conducted close to the time of project completion.

***Metrics Center database file name:*** (Required)

***Metrics Center server name:*** (Required, must be the same server on which the Observatory Scheduled Agents run)

***Email address of the Metrics Manager:*** (Required)

***User ID of the Metrics Manager:*** (Required) This is usually the same as the email address.

The Metrics Manager is a person who will be notified about completed projects. That person will be responsible for selecting the proper metrics question list for that project. The system will then create a questionnaire

using the specified question list for the project manager. The results of this questionnaire will be posted in the Metrics Center database.

## Currency Management

This feature is used only if projects are going to be reported from other countries which include costs tabulated in local currencies. A typical use would be to merge plans made in the US, costed in dollars with plans developed in Europe costed in Euros.

Before enabling this feature, you must define at least one custom currency using the form provided on the customization navigator. You should also set the currency for each project source in the Origin Document for that source. Note that the all projects from a single source (such as a single Project Gateway Repository) must be reported in a common currency.

Once you have defined your custom currencies, and assigned one to each project source using the origin worksheet on the management navigator, you should set this option to Yes.

## Library Management

This section allows you to control what document formats are available in the Observatory Library system. When you create a new format at your site, you must modify this list to include it. Once that is done, it will be available to all observatory users.

**Available Library Formats:** This will default to a list of document format names which will include the following:

LDStandard, LDProblem, LDCharter, LDDiscussion, LDMeeting.Minutes, LDAction.Item, LDWeb.Page.Link, LDChange.Request, LDRisk.Management, LDBriefing.Page, LDBriefing.Link, LDStatus.Report

Do not change this list unless:

1. You do not want one of these formats to be available. In this case, simply remove the name from the list.
2. Your Notes developers have created a new format. In this case add the name of the new format. The name must be the name of a subform beginning with LD. Note that periods are used within the names to represent spaces (which cannot be directly included in subform names). When the user creates a new library document, the list of formats will be displayed by removing the "LD" and converting the periods to spaces. So the name LDChange.Request will appear to the user as "Change Request"

### ***Physically remove manually deleted documents after [x] days***

Project Observatory implements soft-deletion. This means that, when a user uses the "Delete" action on a document form, the document is not actually deleted. Instead, its internal form type is changed so that it effectively disappears from view. A second process physically deletes the document from the database at a later time. The latency between

user deletion and physical deletion allows documents to be "undeleted" by a knowledgeable user. The minimum window for undeletion is set by this setting. A typical setting would be 10 days. Note that this does not prevent a Notes Client user from physically deleting a document. To prevent this, you must remove the "can delete documents" right from their permissible actions in the access control list.

## Briefing Management

**Default script for PROJECT briefings:** [Built-in Default | Custom List]

**Default script for PROGRAM briefings:** [Built-in Default | Custom List]

**Default script for ORGANIZATION briefings:** [Built-in Default | Custom List]

The briefing system is ready to use at startup. Each time a briefing is initiated, you will be able to choose the "Standard" or "Executive Summary" formats. These two formats have scripts that are built into the software and cannot be directly changed. The titles of any custom briefing scripts you have created will be added to the list.

These options allow you to replace the "Standard" briefing script with one of your custom scripts. Since people will tend to choose the standard briefing, this allows you to control their experience. You might do this if you felt that the standard briefing was too elaborate, or if you wanted to include new forms or new web pages.

This is a feature for advanced users who have already mastered the creation of custom scripts. Before you can use these features, you must create a custom briefing script using the form provided on the customization navigator.

**Create briefing links to Gantt Charts in Project Gateway Repositories:** [Yes/No]

If you have a Project Gateway Repository, and if it is Web Accessible, and if you follow our instructions for the installation of the XMLRepositoryObservatory Link in your Project Gateway databases, and include the "Briefing Assistant" agent then set this to Yes.

**(Optional: Default subject selections)** No entry is required.

This is an advanced feature which presets the default subject of each kind of briefing when the briefing feature is selected from the navigator or home page. To use, you must enter the unique project, program or organization identifier number which can be found on the report forms. This is intended for database visitors to point them at an interesting subject for their first briefing. It will primarily be useful in a training or prototype environment.

## Dashboard Styling

To use this feature, you need to be somewhat familiar with Notes. As you will remember, Notes views have an option to use icons. We use this feature extensively to create color coded dashboards. Some sites

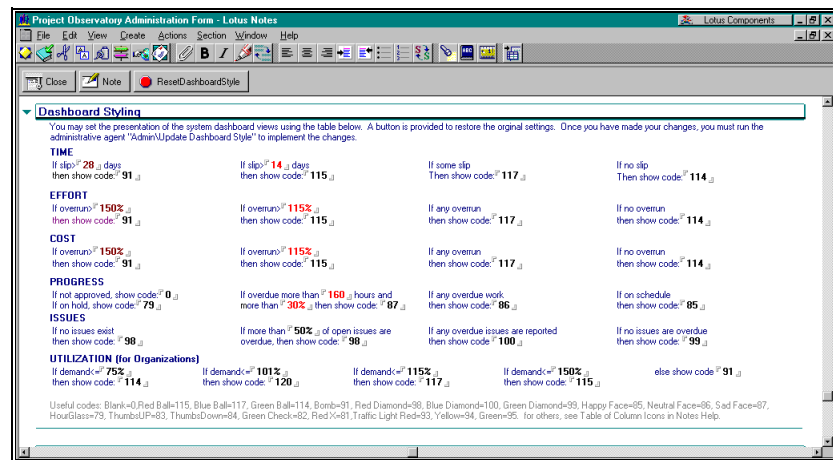
want or need to use different icons and warning levels than we preset. This section allows you to redefine the appearance of the dashboard columns and change the threshold levels.

There are two basic dashboard formats - The Project/Program dashboard and the Organization dashboard.

The Project/Program format has Time, Effort, Cost, Progress, and Issues indicators.

The Organization format has Utilization and Progress indicators. Utilization indicators are displayed for four periods (this week, next week, next 4 weeks, next 13 weeks) but each use the same iconology.

Each of these columns display one of several icons depending upon the underlying data. For example, the Time column has the Green, Blue, Red and Bomb icons. By default, if the enddate is less than the target finish date, the Green Ball icon (114) is shown. If up to 14 days late, the Blue Ball (117). If the slip is between 14 and 28 days, the Red Ball (115) is shown. If greater than 28 days, the Bomb icon (91) is shown.



Default Dashboard Style Settings

You can see in the picture above how the Time column has been defined.

If slip > 28 days then show code [91]

If slip > 14 days then show code [115]

If some slip then show code [117]

If no slip then show code [114]

In a similar way the other dashboard columns are described.

So if you wanted the Time column to show a "Thumbs down" icon when the slip exceeds 30 days (rather than a Bomb icon at 28 days) you would change the first entry to read.

If slip > [30] days then show code [84]

But where does the "84" come from?

There is a set of column icons built into Notes. Each of these has a number and it is these numbers which you insert here. The only icons you can use are those which are provided by Notes. Fortunately that is a fairly good set with lots of choices. We have listed the codes for the icons that seem most useful at the bottom of the section. You can see all the possible icons by going to Notes help, Icons, Table of Column Icons.

### **Implementing your changes**

Once you have defined the thresholds and icons you prefer, you must update the entire database to implement these changes. The Notes Menu command "Admin\Update Dashboard Style" will implement these changes. It does so by updating all of the reports in the database. This will take quite a long time if the database is very large! Therefore it is much better to make changes in the style while the database is fairly small.

Once you have changed the administration form, all new project, program, organization, member, and project commitment reports will automatically conform with the dashboard settings. The purpose of running the Admin\Update Dashboard Style action is to change the *existing* reports. If you fail to do this, then you will have a mixture of new and old iconology which will be very confusing!

People prefer stable frames of reference. Once you have adopted an iconology and threshold settings, leave it alone. We also suggest you create an OnlineGuide page that explains the symbols to your users.

### **Classification Setup Section**

The setting in this section will appear in the Classify dialogs and are used in the Portfolio Analysis views. Instructions are found in the Portfolio analysis chapter of the System Guide for Observatory Users. This setup can be done at a later time; you do not need to deal with this on the first day of operation.

### **Access Control and Edit Log Section**

**Readers** - may be either everyone or only those allowed to modify the document.

**Editors** - will always include the administrator, analysts, and agents (those are specified by role), the person who is set as the manager, and anyone designated as a named users.

**Named users** are selected from the address book or can be manually entered. These can of course be individuals, groups or roles.

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## **Activating Agents**

Project Observatory was designed to be an agent driven application.

It depends upon a set of active scheduled agents to process incoming project reports and maintain the program and organization reports. A

variety of other scheduled agents provide trend analysis and reminder services and do periodic maintenance of the data.

The design also contains a number of manual "Admin" agents for specific support purposes and an even larger group of agents that run only in response web user form submissions and report requests. All these agents should be retained on your site, even if it appears that some of the functions are not immediately required. All of the scheduled agents should be enabled. Each of the optional features is controlled by setting in the Administration form. If these features are disabled, the agent will run for only a couple seconds before quitting. Therefore there is little to be gained by disabling agents, and much future confusion to be spared when the option setting is changed.

Some of these agents can run for long periods of time. ***You must configure the server to allow for these long run times or the system will not function correctly.*** The longest running agents are the Maintain Commitments and Maintain Programs agents. You can keep track of their run times by selecting them in the Administrative Notification section of the Administration Form. When this is checked, you will receive an email after each run which shows the execution time.

As an administrator, you do not need to understand exactly what each agent is doing but you do need to make sure that it is properly signed and authorized to execute and that it is, in fact, executing periodically.

We have preset the agents in our release to run in the nighttime. Using the Agent Status Report you can observe the status of all the agents, enable all the agents in a single step, or if you prefer, you can go to the agent list and schedule each one manually.

## The Agent Status Report

The AgentStatusReport gives you the ability to review the scheduling and last execution date of all agents on a single page. It also has a function to allow you to enable/disable all your scheduled agents in a single action, rather than having to go to each scheduled agent and manually set it.

The Agent Status Report is invoked by a button of that name which is located on the Administration form. It will not appear if the Administration Form is being edited.

Pressing this button will display a page which lists every agent in the database (including any you may have added yourself). For each agent it shows if the agent is enabled (if it is a scheduled agent, otherwise "...") will be shown in this column), the date and time the agent last completed running, the agent name, the owner of the agent (which should be the Observatory ID or at least the ID of a Manager of the database) and the name of the server on which the agent is scheduled to run.

If the agent is a scheduled agent, and it is not enabled, then the words "Why Not?" will appear in the enabled column. If the agent is a scheduled agent, and it has never been run, then the words "Why Not"?

will appear in the Last Run column. This would be acceptable if you had just scheduled the agent, but would be an error indication if the agent had been scheduled for daily operation and had not run last night.

In order for a scheduled agent to operate, it must be enabled, it must be owned by an ID with the right to run unrestricted agents on that server, and it must be assigned to the server.

When you look at this form (in general) you should see a proper manager or Observatory ID name in the Owner column, and same server name in all entries in the Server Name field

If the database has been running for at least one week, then the Last Run time should be shown for all the scheduled agents. For other agents, the last run time will be set only if they have been used.

## Enabling The Agents

There are two ways to enable the agents. In both cases you should start by switching to your Observatory ID. To review, this ID must have Manager rights to the database, and must have the Roles [OBSADMIN] and [OBSAGENT] set in the access control list.

### Manual Method

Go to the Agent List, click the check mark next to each agent. A dialog will appear asking you to select the server.

Repeat this for each scheduled agent.

### Semi-Automatic Method

First make sure that the server that you are using to access this database is the one on which the agents should run. Some sites use a separate server for agents, most use the primary server. The following process will schedule the agents to run on the Current server.

1. Open the database, select Management. On the management navigator, in the upper right, click the "administration" tab. This will display the administration view. Click the Administration document to open it.
2. At the top of the form you will see the AgentStatusReport button. Click it and wait for the report to open (this may take 30 seconds).
3. Now, on the Agent Status Report form you will see the "Enable" button. If you do not, you need to assert the role of [OBSADMIN] on your ID.
4. Press Enable. You will get a message if you are not a manager of the database. Otherwise you will get a confirm dialog with a cautionary warning that shows your current ID. If you want to proceed, press Yes. The actual process will take a couple minutes. When complete, the Admin form will be displayed.
5. Press AgentStatusReport again to see the results. You should see that all the agents now have your current ID as the Owner and that they are all assigned to the current server.

## The Agent List

<b>Agent Name</b>	<b>Normal Frequency</b>	<b>Function</b>
Admin\Agents	Run from Actions Menu	Perform specific administrative actions described in later chapter.
Document Purge Agent	Daily	This agent will physically delete from the database any documents that were manually deleted after their deletion latency has expired. It will also delete certain special form types that are used for report generation such as the xxDeletedHistoryIndex forms.
Forecaster	Weekly	Evaluates trends, creates forecast documents and notifies managers. The behavior is controlled by the Forecasting settings on the Admin Form.
Historian	Weekly	Creates historical copies of current reports when new reports are available. This makes trend analysis possible. The time period between snapshots is defined in the Admin Form.
History Management	Weekly	This agent removes outdated history reports according to the settings in the Admin Form.
Maintain Animation 1	Daily	Processes new and modified Animation Forms by collecting data from current and historical reports. Updates existing animations weekly (or as set in the Admin Form)
Maintain Animation 2	Daily (after MA1)	Processes the results of MA1 by creating .JPG, .RP, and .SMI file attachments from the data using the reference materials in the animation styling document.
Maintain Graphics	Daily, run time depends on number of charts and size of database.	Creates and updates all Gantt Charts defined on the Observations Navigator.
Maintain Skills and Capabilities	Weekly	Operates according to setting

		<p>found in the Admin Form. If no interviewing is allowed, then this agent will immediately terminate.</p> <p>Creates and processes questionnaires for Project Managers and Members to collect skill and location data. Sends emails and email reminders.</p>
Maintain Commitments	Daily or more often, long run time.	This agent calculates all the information found in Organization reports and dashboard views. Should run on same schedule as Maintain Programs.
MaintainPrograms	Daily or more often, long run time.	This agent calculates all the information found in Program reports and dashboard views. Must run at least daily, more often if possible. Run time can be long.
Observatory Interproject Dependency Agent	Daily, short run time.	Reviews Interproject dependencies and sends email when required.
Observatory Metrics	Daily, short run time.	<p>Identifies finished projects and completed metrics questionnaires and initiates new questionnaires and puts new data into the Metrics Center database.</p> <p>Must be run on a server that has the Metrics Center database or a replica thereof. Must be signed with an ID that is also listed as a manager of the Metrics Center database.</p>
Reminder Notification	Daily	Sends email to project managers, program managers and administrator about missing reports and certain problems. Controlled by Admin Form settings.
XMLMessageProcessingAgent	Daily or more often. You can also set this agent to run when new mail is received.	This is the primary agent of the database, it decodes all incoming messages and creates/updates all project reports and project commitment

	Note: if you are not allowed to have execution times of at least 15 minutes during the daytime period, set the agent to run periodically on a Daily schedule so it runs only at night.	reports. The run time will be a function of the number of reports received since it was last run.  If run as a daily scheduled agent, then this agent should run before the Maintain Programs and Maintain Commitments agents.
Processed Reports Management	Daily, unless the Retain processed reports setting on the Admin Document is zero, in which case the agent does not need to run.	Deleted processed reports which have been kept for longer than the retention time specified on the Admin Document.
Remove and Archive Projects	Weekly	This will remove any projects which have been manually marked for removal or which meet the automatic archiving criteria. This agent will make copies of certain kinds of documents (project reports and library documents) and put them into the Observatory Archive database.  The Observatory Archive database, or a replica thereof, must be located on the server on which this agent is scheduled to be run.  This agent does only soft-deletion. The physical removal of the archived projects is done by the Document Purge Agent after a latency period.
(Briefing Agent)	Run whenever a briefing is initiated. Set to run from Agent List and "Run Once"	This agent is executed only as part of a URL request to the server. It works in conjunction with the obsBriefingSupport script library and the custom briefing documents to create the frameset and control panel for the briefing or the URL that displays the Executive Summary page.

(Graphics PGG0,PGG1,PGGF)	These are run by the MaintainGraphics Agent	Generate Gantt charts from chart definitions listed on the Observations Navigator
(WebCapacityProfileAgent) (WebChangeCalcStatusAgent) (WebChangeOrgNameAgent) (WebChangeProgramName Agent) (WebChangeSkillAgent) (WebNoteToManagerAgent)	These are run as part of web forms. Set to run from Agent List and "Run Once"	Implements database changes requested by web users.
(WebAgentStatuReport)	These are run as part of web forms. Set to run from Agent List and "Run Once"	This is executed from a URL created by the AgentStatusReport button on the Admin Form. It returns a Web page.
(WebCheckAvailabilityAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	This agent is run as a QuerySave agent from the Check Availability web form. It returns a web page showing the current commitments and available time of that organization.
(WebCustomBriefingOpen) (WebCustomBriefingSave)	These are run as part of web forms. Set to run from Agent List and "Run Once"	These agents run as part of the Custom Briefing form when used by web clients to initialize the help instructions (open) and to validate the user script (save).
(WebCustomLocationsMapAgent)	Set to run from Agent List and "Run Once"	This is run from a URL as an ?OpenAgent with parameters that transmit the objects and coordinates. Is used to create maps from search results.
(WebEditNewVersionAgent)	Set to run from Agent List and "Run Once"	This is run when the Edit New Version action is used on a library document by a web client. This must be invoked via and ?OpenAgent URL. It creates a copy of the specified document and makes it a response to the current document.
(WebExportFile.csv)	This is run as part of a web form. Set to run from	This is executed by the submission of an Export

	Agent List and "Run Once"	Resource data form. It will return with a download file object using the .csv extension which compatible with spreadsheets and databases.
(WebExportFile.m2k)	This is run as part of a web form. Set to run from Agent List and "Run Once"	This is executed by the submission of an Export Resource data form. It will return with a download file object using the .m2k extension which is used by macros we provide for Microsoft Project.
(WebHistoryIndexAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when the "Click here for Historical Reports" action is used by web client. This creates a working document using the xxDeletedHistoryIndexForm which will be eventually deleted by the Document Purge Agent.
(WebLibraryActionAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once" This particular agent should be set in Agent Properties, Design to <b>"Run Agent as Web User"</b> otherwise anyone will be able to softdelete any library document.	Run when the associate action is selected by a web client on a library document. Is also used to process transaction forms used in the association process.
(WebMemberLocationMapAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when a Member Location map form is created by a web client.
(WebNewLibraryDocumentAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when a new library document is created by a web client.
(WebNoteToManagerAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when the "Note" form is submitted by a web client. Sends the note to the manager of the designated organization.
(WebPortfolioChartAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when the Portfolio Selection form is submitted by a web client. Generates the result data and opens the portfolio chart form.

(WebPreviewAnimationAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when the Preview action is selected on an animation document, returns a web page which contains start and finish jpegs from the animation documents.
(WebProjectLocationMapAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when a Project Location map is created by a web client.
(WebProjectWaterfallAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when a Project History or Program History diagram is created by a web client.
(WebReportIssuesAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when the Issues Report is created by a web client.
(WebReportMilestonesAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when the Milestone Report is created by a web client.
(WebReservationNotifyAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when a reservation is created by a web client to send notification (if necessary) to the manager of the reserved organization.
(WebResetBriefingAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Run when the Reset option is used on a Custom Briefing script from a web client. Sets the contents of the script to the internal defaults found in the obsBriefingSupport library.
(WebSearchAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Does search for resources for web clients and returns a web page.
(WebSkillSpectrumAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Collects data for Skill Spectrum Reports when done from web clients.
(WebWorkPlanAgent)	This is run as part of a web form. Set to run from Agent List and "Run Once"	Collects data for Work Analysis reports when done from web client.


## Agent Run Time

Typical agent run times on small department sized server, dual 450mhz PIII, 256 MB.

*XML Report Processing* - 8 seconds per report processed.

*Maintain Programs* - 1 second per project/program in the database.  
The first run of each new week will be longer than average.

*Maintain Commitments* - 0 .35 seconds per project commitment in the database. The first run of each new week will longer than average.

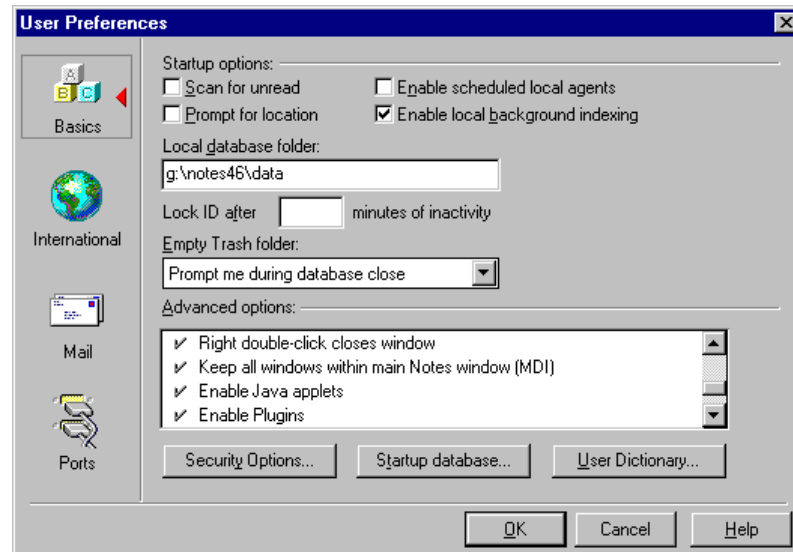
## Configuring Clients

### Notes Clients

Notes Clients prior to version 4.6.1 are unable to use the Graphs function because they do not support Java. Starting at version 4.6.1 you should be able to display graphs by pressing the Graphs button on any of the Project Report, Program Report, Organization Report, or Project Commitment Report forms.

In order to prevent problems, the Graphs button is hidden from view if the Notes client version is earlier than 4.6.

On the client, use the menu command File, Tools, User Preferences, and check the Advance Options setting labeled "Enable Java Applets"



Note: the Observatory Explorer Graphs Java applet is approximately a megabyte in size, so that it will take some time to download to the client each time the button is pressed. It is not cached by a Notes client.

## **Web Browsers**

Most browsers fully support the Java 1.1 release that is used by the Observatory Explorer and other applets. If you have difficulty in running the Graphs function from the browser, please check our web site for suggestions. We have tested it on Netscape 4.5/4.7 on PC and IRIX, on Hot Java on Solaris, and on IE4/5/5.5 on PC's and Mac.

Make sure that Java and Javascript execution is enabled in your browser.