

Using Deliverables

Introduction

The deliverables facility supports top down, goal oriented, management planning and reporting. It is separate from the project management facilities of Project Gateway, but can be closely linked with them.

Deliverables specify specific management goals. You may, from time to time, implement projects to achieve these goals, and when you do, you can set up automatic links between project status and relevant deliverables. But it is important to understand that you can use the deliverables facility before you have projects scheduled, and that the organization of the deliverables may be quite different from that of your projects and programs.

Simply stated, a deliverable is a goal, not a task. As a goal it may have a target date for completion, a budget for completion, and probably will always have an assigned responsibility.

Deliverables are structured as trees. The top goal becomes the head of the tree and each subgoal (which we call a subdeliverable) becomes a leaf of the tree.

Language is important here. A deliverable is a goal, not a task. So it should be described with a noun phrase, not a sentence. "Year 2000 Compliance" is a deliverable. It might have sub deliverables of "Accounting", "Sales" and "Manufacturing". They in turn might have subdeliverables of "GL system", "Payroll System", etc. Each might have a different person responsible and a different target date and budget.

The lowest levels of your deliverables tree may be interconnected to specific projects, groups of projects, or project events from multiple projects. Generally the deliverable will be defined before the projects are created, because the projects are created to achieve the goals set out in the deliverable. The links to projects may be added or removed at any time.

Since project information may not be available, the deliverable system provides a very flexible way to provide definition details and manual status reporting. You can define deliverables and begin using them as a management reporting tool immediately.

Most organizations like to believe that with enough time they can create a master work plan that optimizes everything. This is very difficult to achieve in practice. The deliverables facility lets you define a master

vision that will at least encompass all of what you are trying to accomplish without requiring you to master all the details of implementation beforehand.

The Deliverables Dashboard

The Deliverables Dashboard view shows the tree structure you have created with colored status indicators for each. This allows you to see the status of a very large effort at a glance.

Deliverable	Time	Effort	Events	Risk	Status	Steps	Next	DueDate	Estimate	BAC	EAC
Active											
Service 21 Initiative	●	●			OK			06/01/2002	03/21/2002	15,000	
- Finance	●	●			Achievable			06/01/2002	06/02/2002	600	
- Documentation	●	●	0%		AtRisk			06/01/2002	11/16/2001	7,000	
- EndUser	●	●	50%		OK			03/26/2002	08/05/2001	500	
- Help Desk	●	●			Achievable			04/21/2002	03/21/2002	500	
- ISO 9001	●	●			OK	0/6 Finish open...		04/01/2001	03/27/2001	900	
- Production Services	●	●			Future			11/01/2000	12/01/2000	2,000	
- Audit	●	●			OK			03/01/2000	04/01/2000	200	
- Benefit Management	●	●	100%		Completed			11/01/2001	12/22/99	3,700	
- Employee Handbook	●	●	50%		Future			06/01/2002	12/18/2000	500	
- Online Handbook Site	●	●	40%		Future	3/6 Setup filenames...		02/01/2002	12/18/2000	500	
- New Employee Systems	●	●			OK	2/5 Engineering...		12/01/2000	02/01/2000	600	

This view is divided into two primary sections: Active and Inactive. A first level Deliverable becomes inactive when it is marked completed. At that time, the entire tree becomes classified as *InActive*.

The left column shows the title of each level of the deliverable tree with twisties allowing the tree to be selectively expanded or collapsed.

Time and Effort Indicators

The two color balls labeled Time and Effort show the status of the goals of the deliverable against the target completion date and target effort at completion.

Green Ball - Time or Effort within target

Blue Ball - Time less than 2 weeks over target, Effort less than 15% over target.

Red Ball - Time more than 2 weeks but less than one month over target, Effort more than 15% but less than 50% over target.

Bomb symbol - Time more than one month late, Effort more than 50% over target.

Key Events Indicator

If key events are attached to this deliverable, this shows the current percent complete of those events. If no events are attached, then this column is empty.

Risk

If there is a Risk Statement on this deliverable, an "eyeglass" icon appears in this column.

Status

This is a word or short phrase about the deliverable selected from a site customizable list.

Steps and Next Step

If a checklist is associated with this deliverable, the number of steps completed/total number of steps will be displayed. In the adjacent column, the first words of the description of the first uncompleted step are shown.

DueDate and Estimate

These are the target and estimated completion dates for this deliverable.

BAC and EAC

These are the target and estimated hours of effort at completion. Acronyms for "Budget At Completion" and "Estimate At Completion."

Owner

This is the person identified as the owner of the deliverable

Creating A Deliverable

From the deliverables navigator, select "Create an new first level deliverable" to open a new deliverable form.

The Deliverable Form

Deliverable	
Name:	
Status:	
User ID for Manager:	Laura Jones/MarinResearch (for edit access to this document)
Owning Project (optional):	[N/A]
Owner:	Laura Jones/MarinResearch <input type="checkbox"/> Notify if Red Condition
Required completion date:	
Estimated completion date:	
Budgeted Effort:	0
Estimated Effort At Completion:	0.00
Description:	
Checklist:	
Projects:	(None)
Key Events:	BZ
Document Access and Edit Log	

New Deliverable Form in Notes Client

Name

This is the title of the deliverable. Since this is a top level item, it should be short and clear.

Status

This lets you select a word or short phrase to describe the status.

UserID for Manager

This should contain your User name. You may add the names of any other people who should have the right to modify this deliverable document.

The screenshot shows a web form titled "Deliverable" with a breadcrumb trail "Home Deliverables Documents Projects". The form includes the following fields and options:

- Name:** A text input field.
- Status:** A dropdown menu set to "Achievable".
- UserID for Manager:** A text input field containing "Anonymous" with a note "(for edit access to this document)".
- Owning Project (optional):** A dropdown menu set to "[N/A]".
- Owner:** A text input field containing "Anonymous" and a checkbox for "Notify if Red Condition".
- Required completion date:** A date input field.
- Estimated completion date:** A date input field.
- Budgeted Effort:** A text input field containing "0".
- Estimated Effort At Completion:** A text input field containing "0.00".
- Description:** A large text area with a "File Attachment" field and a "Browse..." button.
- Checklist:** A section with the note "(numbered items have been completed)".
- Projects:** A dropdown menu set to "[None]".
- Key Events:** A text input field containing "0%".
- Document Access and Edit Log:** Two dropdown menus: "Who can read this document:" set to "Everyone" (with a note "select everyone, author, or the name of a team") and "Who can change this document:" set to "Author, Profile & System Mgrs" (with a note "select author, or the name of a team").

New Deliverable Form (Web)

Owning Project

This is the project, if any, which owns this deliverable. This allows deliverables to be used as components of projects as well as projects to be used as components of deliverables.

Deliverables that are owned by projects can be shown in the Project and Program level Deliverables Reports.

The code "[N/A]" is used when no project is specified.

Owner

This is the name of the staff member responsible for the accomplishment of the deliverable.

Required Completion Date

This is simply the date when the deliverable must be completed. It is a goal, not a computed result. If no such goal exists, then leave this field blank. If you do, the dashboard indicator will not be displayed.

Estimated Completion Date

This is the date when the deliverable is expected to be completed. If no information is available, you should probably set this to be the same as the goal. The relationship between this date and the one above will determine the color of the indicator shown on the dashboard. There are several ways to make this field update automatically which will be described later.

Description

This is a rich text area to define the deliverable.

Checklists, Projects & Key Events

These are optional fields that are set using the action buttons on the form. They are described in more detail later in this section.

Creating Subdeliverables

Deliverables are structured as a tree with levels of indentation corresponding to the hierarchy of goals. As a practical matter, you should sketch out your goals on paper before constructing the deliverables because there is no way to easily reorganize the tree structure once it has been entered into the database.

To create a subdeliverable, open the parent deliverable and press the "Sub Deliverable" action button at the top of the form.

The name of this subdeliverable will be a combination of the name of the parent with a unique new name you provide for this item.

E.g. If the Parent is "System 21 Initiative" and the subdeliverable is called "Audit" then the full name of the subdeliverable is System 21 Initiative\Audit.

You never directly enter the name in this composite form, the system always constructs it.

In the deliverable dashboard view, each level of the tree is sorted alphabetically within that level. If it is important that deliverables appear in some particular order, you may want to name them with leading digits or letters (e.g., 1. Training, 2. Development or A. North America, B. Europe, C. Asia)

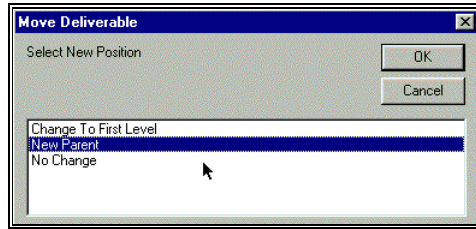
When you create a subdeliverable, many of the field values are inherited from the parent. In particular, if the parent has a checklist or is set to summarize subdeliverables, you may need to change the checklist or the options settings. Any subforms attached to the parent will also be inherited.

Move - Reorganizing the Deliverables Tree

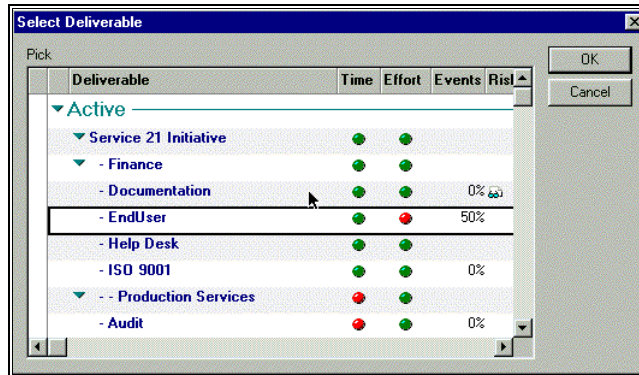
The Move action allows you to reorganize deliverables. Existing subdeliverables can be transformed into first level deliverables or relocated to be subdeliverables of new parents.

Moving Deliverables (Notes)

When you select Move a dialog is displayed offering the opportunity to make it a first level deliverable, reposition it, or to do nothing.



When New Position is selected, another dialog appears showing the existing deliverables. Select the new position.

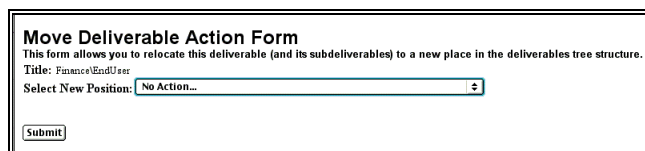


If this position is not logical (because you are making the deliverable a child of itself), you will get a warning message, otherwise the deliverable will be renamed and repositioned in the dashboard view.

Note that the deliverable will immediately close when this action is done and that you will see the confirmation prompt "Implement Change in Position." You must OK this prompt to move the deliverable to its new position.

Moving Deliverables (Web)

Click on the Move action to display the Move Deliverable Action Form. In the droplist will be the names of all possible new locations for the deliverable, and the option for changing it to a first level deliverable. Select and press Submit.



The deliverable will be redisplayed with its new name. There is no further confirmation. Note that you must have the right to modify the deliverable in order to move it.

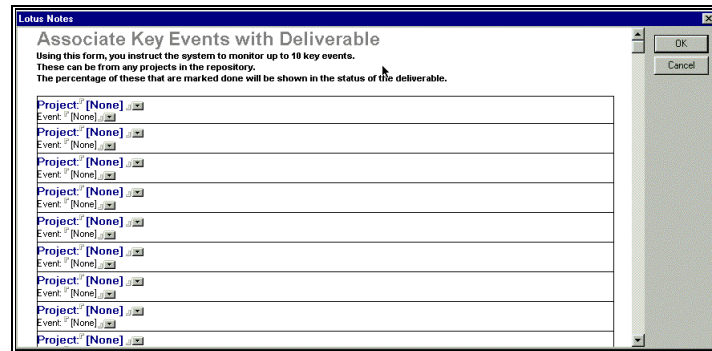
Linking Deliverables

Deliverables can be linked in several ways.

1. To rollup subdeliverable dates and efforts
2. To track project events
3. To track project budgets

Tracking Project Events

Pressing the Associate Key Events button on the deliverable form will display the Associate Key Event with Deliverable dialog box.



This dialog must be scrolled to see the bottom of the form on some systems.

Here you may select up to 10 key events, from up to 10 different projects.

At the bottom of the form you make one of two selections

1. Update Event List
2. Update Event List and Link to Estimated Completion Date

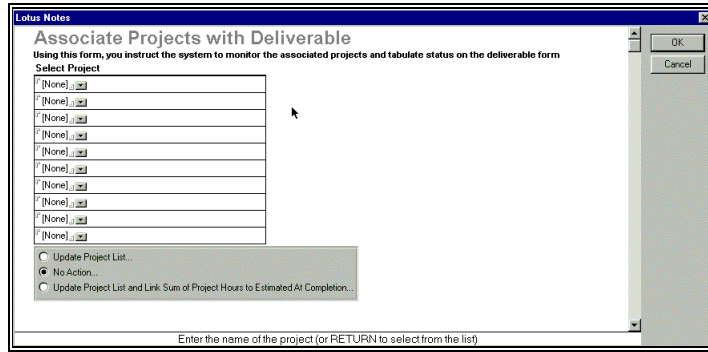
Selecting "Update Event List" will put a list of the key events into your plan and will put the average percent complete of these events onto the deliverables dashboard.

Selecting "Update Event List and Link to Estimated Completion Date" will create the same list, but, in addition, will link the estimated completion date with the latest of the completion dates of any of the key events you have specified. As those dates change, the deliverables estimated end date will be adjusted. This in turn may cause the status of the deliverable and its parents to change. When this linkage is enabled, a message will appear to the right of the estimated completion date showing the name of the linked event that is driving the schedule.

Note: If more than one key event is in the list, the linked date will be the date of the key event whose scheduled or actual finish date is the latest of the set. This means that the effective link may change as key events are rescheduled.

Tracking Project Effort

Pressing the Associate Project button will display the "Associate Project with Deliverable" form. Select up to 10 projects.



At the bottom of the form you get to make a selection between:

1. Update Project List
2. Update Project List and Link Sum of Project Hours to Estimated At Completion.

When you pick the first option, the effect is simply to list the projects in the space provided in the deliverable form. This is primarily meant as a way to reference them for others to see.

When you pick the second option, the sum of the estimated effort at completion for all the projects will be linked to the estimated effort of the deliverable. When the project effort changes, the deliverable effort will be updated. This in turn can cause a change in the status of this deliverable and its parents on the dashboard.

Using Deliverables from a Web Browser

When opened from a browser, hyperlinks appear to higher and lower subdeliverables. Instead of the Checklist, Associate Project, Associate Key Events buttons that appear in the Notes Client, the words Checklist, Project and Key Event are linked to the transaction forms that modify them.

When any of these transaction forms is submitted, the deliverable will be redisplayed with the new settings.

Another difference is that, if items in a checklist are checked, they are displayed with leading digits (1, 2, etc.). Unchecked items do not have leading digits next to them. When you Edit the deliverable the checkboxes appear.

Checklists

A checklist provides a simple, understandable way to track the progress of a deliverable. It is not dependent upon the existence of a project plan or specific tasks. Any deliverable can have a checklist, and the checklist can be customized for that specific deliverable or a standard checklist can be used unmodified.

As the deliverable is worked on, the owner should update the checklist section of the form. The dashboard shows the ratio of completed to total

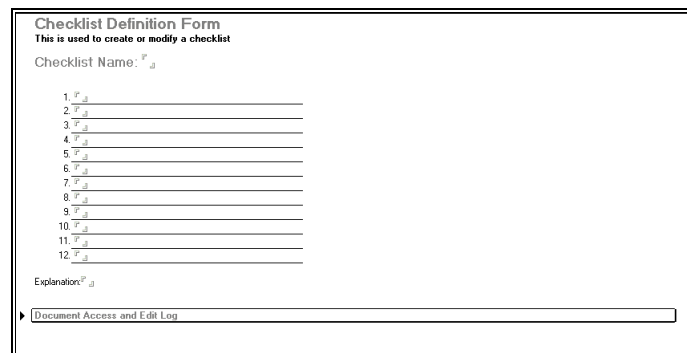
steps as a metric of relative progress and shows the name of the first uncompleted step (if any remain).

So you can think of a checklist as a mini-tasklist that is used in lieu of a project plan, or a top level "phase review" for a major deliverable whose situation may not be easily understood from the details of associated projects.

Creating deliverables with checklists provides a very simple way to get project management underway in an organization that does not require critical path scheduling or resource planning.

Creating Checklists

Select "Create a new Checklist" from the Deliverables Navigator. This will display the Checklist form.



Checklist Definition Form
This is used to create or modify a checklist

Checklist Name: _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

Explanation: _____

Document Access and Edit Log

Enter a title for the checklist.

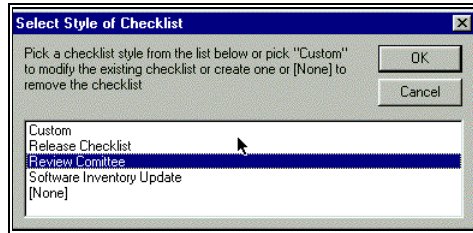
Enter up to 12 checklist steps. Try to make them short, and make the first words in each meaningful.

If possible, provide an explanation of the meaning of each step so that another person will be able to interpret the steps correctly. For example, if you had a step called "signoff budget", you might want to note that the signoff requires the written approval of the division manager and the finance administrator.

When you have finished, save or submit the new checklist. It can now be used by others. The list of saved checklists can be selected using the "All Checklists" item on the Deliverables Navigator.

Assigning a checklist to a deliverable

Open the deliverable and press the Checklist button in Notes or the Checklist link on the Web. This will present a dialog or form that lists available checklists. Select the one you want.



If there are checklists predefined, then you may select one. If you want to make a new checklist for this deliverable, press Custom.

To customize a predefined checklist, first assign it to the deliverable, then press the Checklist button link again and select Custom. This will display the original checklist and allow you to edit each row before saving it.

Checking off steps

You must be in edit mode to mark steps complete. Simply click on the checkbox to set or unset the checkmark.

When you are in read mode and are using a Web client, checked items will be shown with a leading number whereas unchecked items will not have a leading number. The actual checkboxes show only when you edit the deliverable document.

In Notes, the checkbox symbols are visible at all times, but you must enter edit mode to change them.

Dashboard Display of Checklists

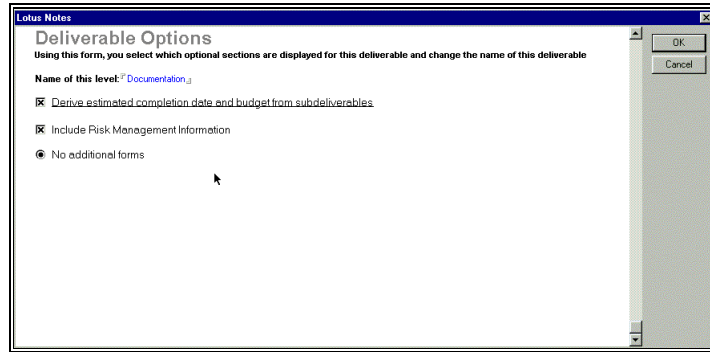
Two columns of the deliverables dashboard are used to report on checklists. The first column shows the number of checklist items completed followed by the total number of items defined (e.g., 2/6).

The second column shows the first word or words of the first item in the list that has not been completed. So if you define a checklist with 6 steps and check off the first two, the third step will show on the dashboard. But if you checked off the first and fourth steps, the dashboard will still show 2/6 but the title of step 2 will be shown because it is the first uncompleted step.

Deliverable Options

The Options function allows you do four important things.

1. To change the name of the deliverable.
2. To link the deliverables effort and completion date to its subdeliverables.
3. To display or hide the Risk management section of the deliverable.
4. To add or remove a supporting information subform to the deliverable. This allows custom variations of the deliverable form to be created.



Notes Clients may set options by entering edit mode and pressing the Options button. Select the desired settings and press OK. If you change subforms, a message will appear telling you that you must close and reopen the deliverable to see the change.

Web Clients will see the Options action displayed when reading the deliverable. Selecting this link will display the Deliverable Options Form. Enter the desired settings and submit. The Deliverable will be redisplayed with the changed implemented.

Changing the Deliverable Name

On the options form you can change the deliverable name or the name of this level. If the deliverable has subdeliverables, the names used in the subdeliverables will not be updated until an agent runs. As a result, hyperlinks between levels may be inoperative for some time. Any level, however, can always be reached from the dashboard.

Summarizing Subdeliverables

By setting this option, you tell the system to set the estimated completion date of this deliverable to be the latest estimated completion date of any of its subdeliverables. You also set the estimated effort at completion to be the sum of the estimated effort at completion of all the subdeliverables.

This is a very important feature for the top levels of your tree, but it should only be used when all of the lower levels have been specified and estimated. Until that time, it is better to simply provide manual estimates at the top of the tree.

Summarization is implemented using a background agent. As a result, changes made at lower levels will not be reflected in the summarized levels until the next time that the agent runs.

Risk Management

The central concept of risk management is that organizations respond better to problems that they anticipate than those which come as a surprise.

Deliverable	
Name: Service 21 Initiative\Documentation	
Higher Level: Service 21 Initiative	
Lower Level: [None]	
Status: Red Flag UserID for Manager: Tracy Rose/MarinResearch (for edit access to this document)	
Owning Project(optional)	AA Research
Owner:	Tracy Rose/MarinResearch <input type="checkbox"/> Notify if Red Condition
Required completion date:	06/01/2002
Estimated completion date:	11/16/2001 linked to: A Deployment Plan : Develop Performance Analysis Tool
Budgeted Effort:	7000
Estimated Effort At Completion:	2654.73 <linked to hours of projects listed below>
Description:	
Checklist:	
Projects:	<ul style="list-style-type: none"> <input type="checkbox"/> Plus Rollout of Project Gateway <input type="checkbox"/> AA Research <input type="checkbox"/> Customer System Training Development
Key Events: 0%	0 A Deployment Plan : Develop Performance Analysis Tool
Risk Management	
Risk Statement:	If not half way through by 1/18/00
Mitigation Strategy:	Hire four consultants to help finish this project
Contingency Plan:	Provide a cushion in the accounting budget to allow for this possible expenditure
<input checked="" type="checkbox"/> Contingency Plan Completed	
Trigger:	1/18/00
Probability of Risk:	Medium last assessed on: 11/15/99

Of course all deliverables have some uncertainty. But "worries" are not the purpose of this section. Rather, this section is to be used when you have a well defined potential problem that may have major impact to the schedule or budget but which may not occur. (If you know the problem will occur, you should build it into the estimated completion date or estimated effort.)

When you select "Risk" you add the following items to the deliverable form:

1. A statement of the risk that is foreseen:
2. A list of actions you are going to take to prevent the risk that you have identified from actually happening. This is called a Mitigation Strategy.
3. A plan for dealing with the risk if it does happen - This is your "Contingency Plan"
4. A condition - called a trigger - that anyone can use to determine whether the contingency plan needs to be implemented
5. An assessment of the risk (how likely is it to happen) and a date at which this assessment was made.

The most important part of this section is the first part - the recognition of the existence of a specific risk and its consequences. The other key part is the contingency plan. The effort in defining what this should be usually gives you a better handle on how to avoid the risk and helps others understand what will happen if the anticipated problem arises.

Including Subforms

Sometimes the best way to fully define a deliverable is with a set of specific questions. Project Gateway does not provide any standard subforms, but you can customize the system to provide them. When you have done that, the names of the subforms will appear in the options dialog.

Due to the way Notes works, when you change the subform selection you must close save and reopen the deliverable before the subform appears in the document. A prompt is generated to remind you of this.