

Delivering a CMMI Compliant Project Plan in 30 minutes

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- ▶ SEPG 2005

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The Select Solution...



“Select is a market leader in Ability to Execute and Completeness of Vision”: 2002

Gartner

Process Improvement Goals

- ▶ Improve Consistency and Standardization
 - Process Director used to deploy process across geographically dispersed and multi-level security organization
- ▶ Improve Systems and Software Engineering Capability
 - Current Organization Standard Process (OSP) consists of seven lifecycles (3 non-engineering and 4 engineering)
- ▶ Decrease Process Implementation Time
 - Using this approach Booz Allen achieved CMMI Level 2 with a 200 person organization
 - Process Director tool significantly reduces planning time
- ▶ Make Processes More User Friendly
 - Process Elements provide references, best practices, and templates for all activities

The Project Managers (PM) Challenge

Problem	Process Value Added
Insufficient planning time	Rapid planning ability using Microsoft (MS) Project
Organization Standard Process (OSP) consists of hundreds of process elements: which ones are applicable to my project?	Agile Process Wizard leads PM through a series of questions to screen and tailor OSP to produce the Project Defined Process (PDP)
I need to plan my project: What activities should I plan for?	OSP Lifecycles provide sequenced project activities based on past performance, templates and best practices.
I need to integrate my process planning into my project: How do I plan a process?	Agile Process Wizard helps PM select appropriate processes and integrates them with project activities.

Approach

- ▶ People
 - Process Definition team comprised of mix of project practitioners and process experts
 - Team trained in Process Definition and Notation; Process Tool; CMMI
- ▶ Process
 - OSP developed to be compliant with multiple models and standards
 - OSP designed to be used with the technology chosen and tailoring guidelines are integrated into logic
 - OSP target audience is junior personnel with minimal training
- ▶ Technology
 - Process Tool chosen that could support geographically dispersed organization using a variety of deployment methods
 - Tool needed to support the multi-dimensional nature of the OSP
 - Tool needed to be MS Project compatible



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Agile Process Wizard



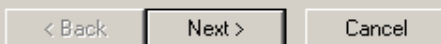
Welcome to the agile process wizard.

This wizard helps you to select the appropriate published process and to tailor it to your individual project's needs.

We will give you the opportunity to respond to questions about the most appropriate lifecycle for your project, which parts of the process can be ignored and alternative ways of performing the process.

We will then tailor the process based upon the needs of your project ensuring that your process is as agile as possible.

To continue, click Next.

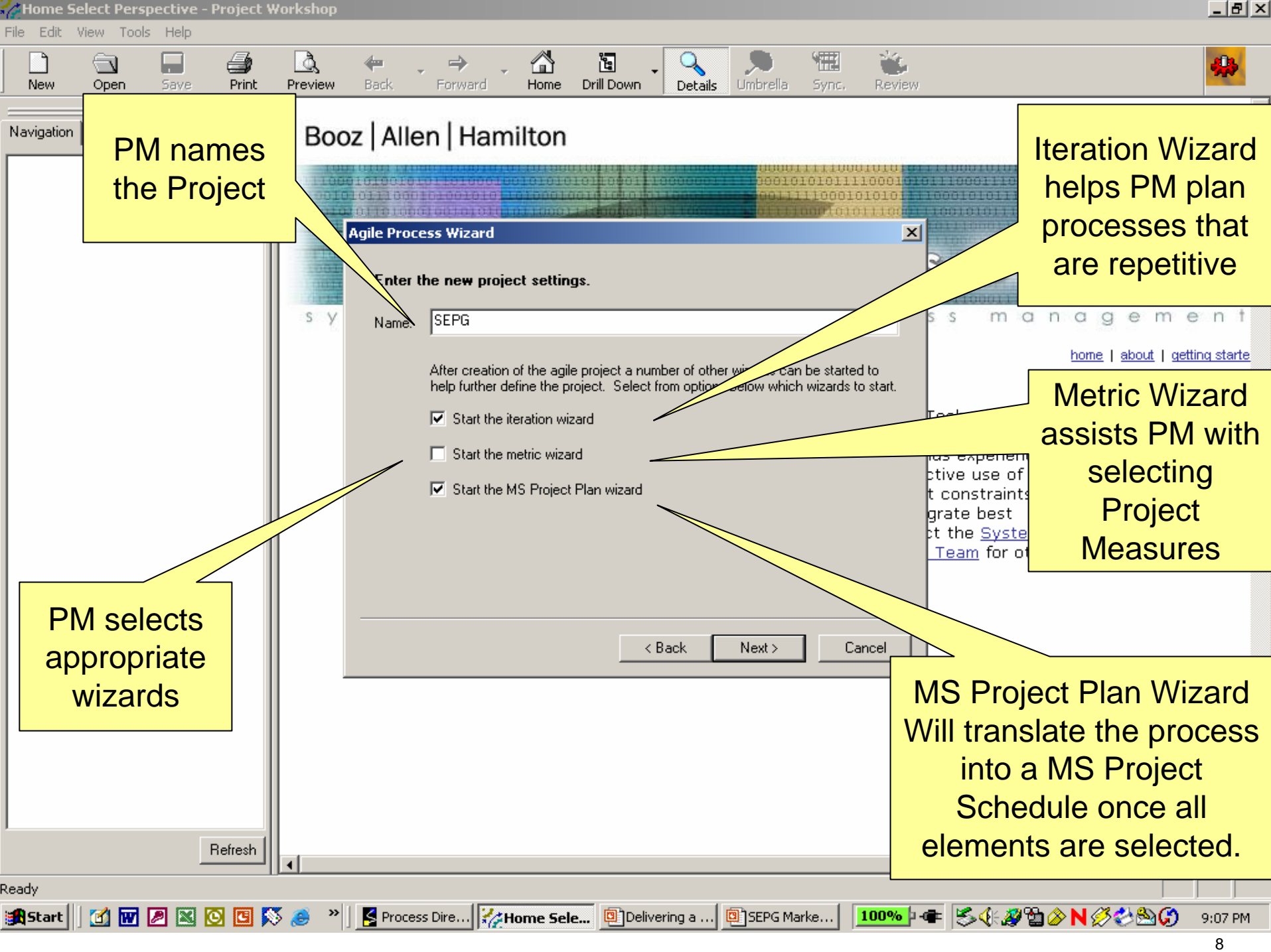


PM has just chosen to create a new project and process director immediately presents the PM with the Agile Process Wizard which will begin the screening and tailoring process.

Note at this point no processes are visible in the Navigation tab because the PDP does not yet exist.

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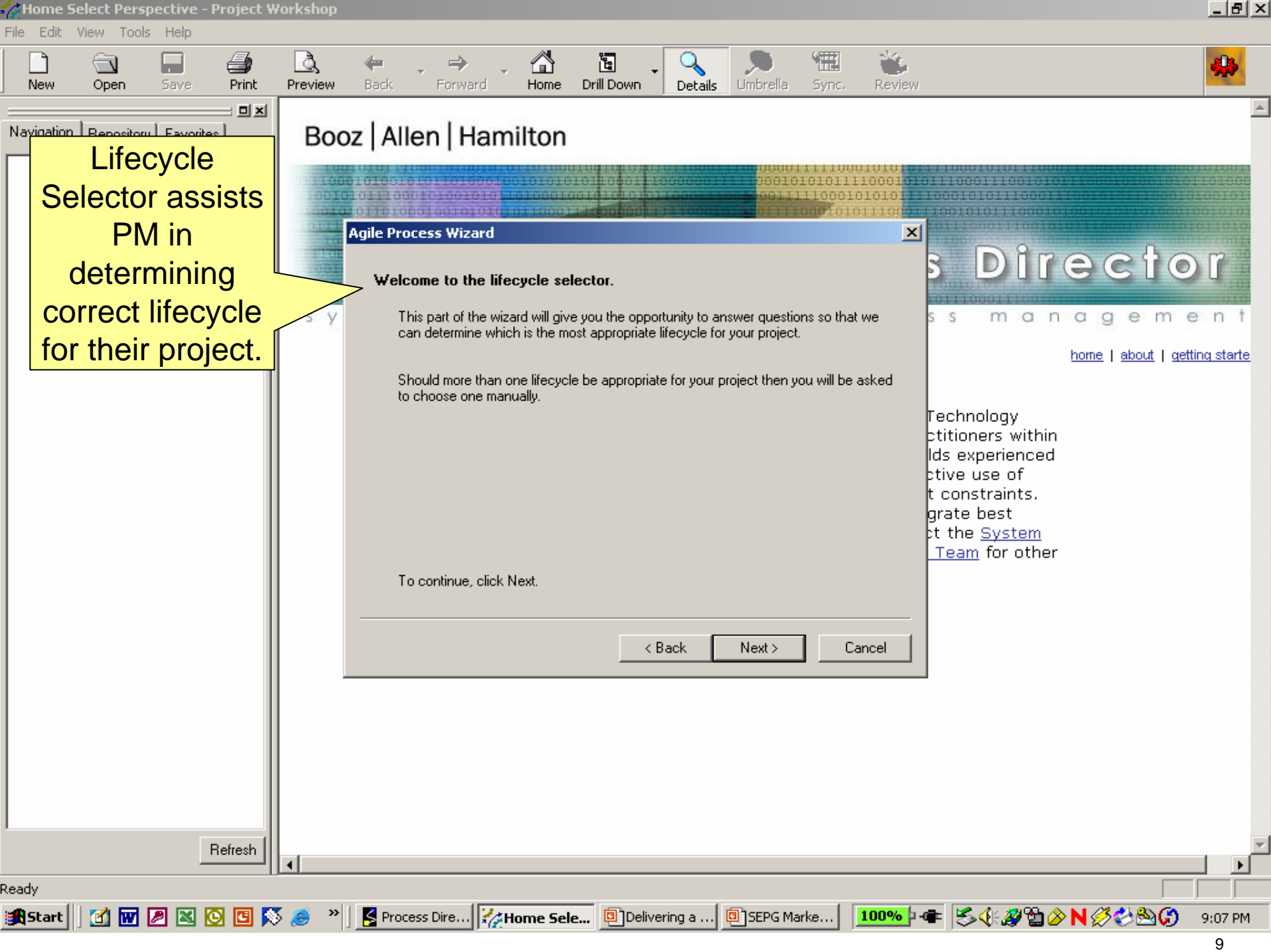
PM names the Project

Iteration Wizard helps PM plan processes that are repetitive

Metric Wizard assists PM with selecting Project Measures

PM selects appropriate wizards

MS Project Plan Wizard Will translate the process into a MS Project Schedule once all elements are selected.



Lifecycle Selector assists PM in determining correct lifecycle for their project.

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Agile Process Wizard

Welcome to the lifecycle selector.

This part of the wizard will give you the opportunity to answer questions so that we can determine which is the most appropriate lifecycle for your project.

Should more than one lifecycle be appropriate for your project then you will be asked to choose one manually.

To continue, click Next.

< Back Next > Cancel

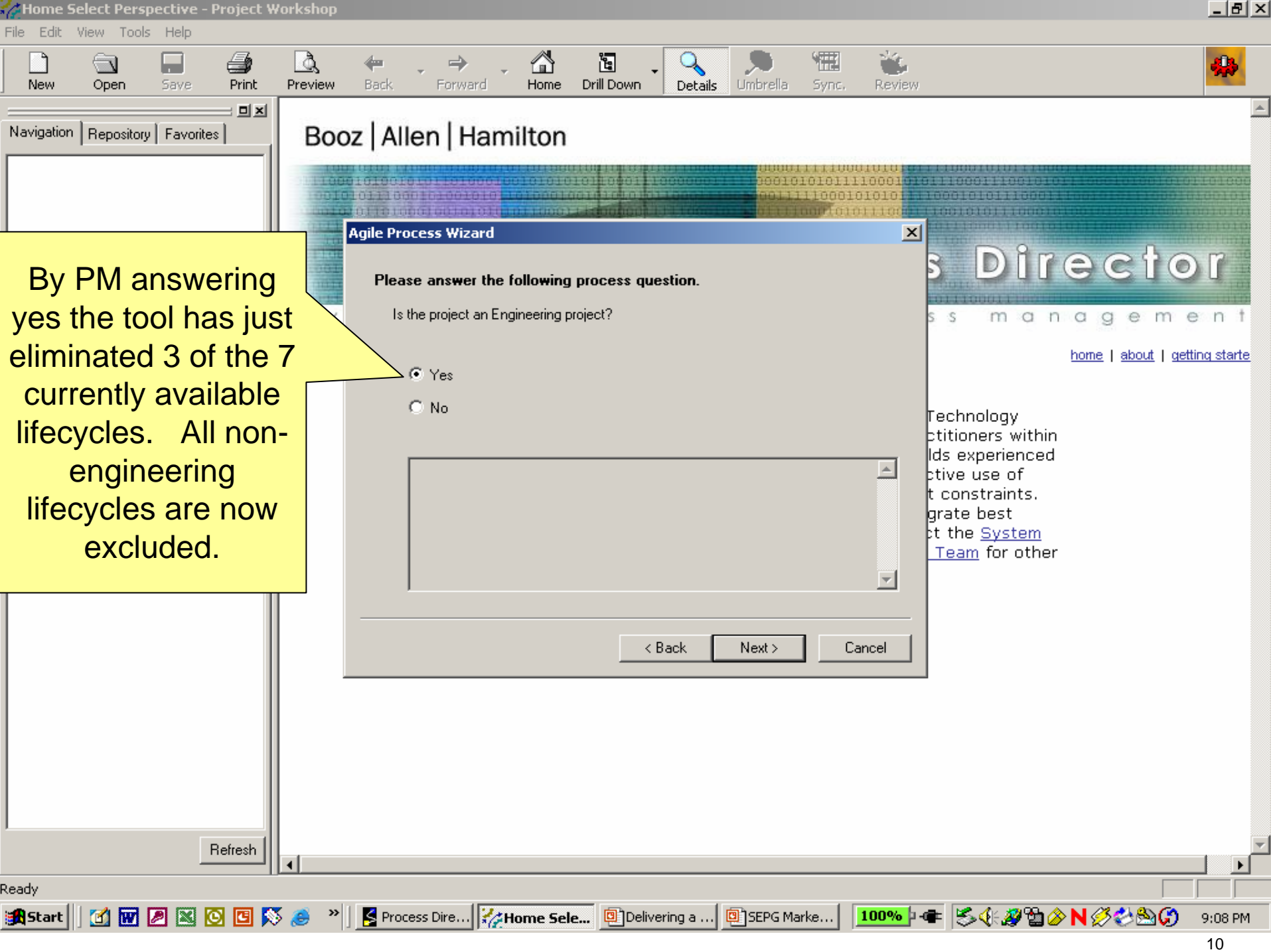
Project Director

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Technology practitioners within the industry have long experienced the challenges of managing project constraints. To integrate best practices and to meet the [System](#) and [Team](#) for other

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Agile Process Wizard

Please answer the following process question.

Is the project an Engineering project?

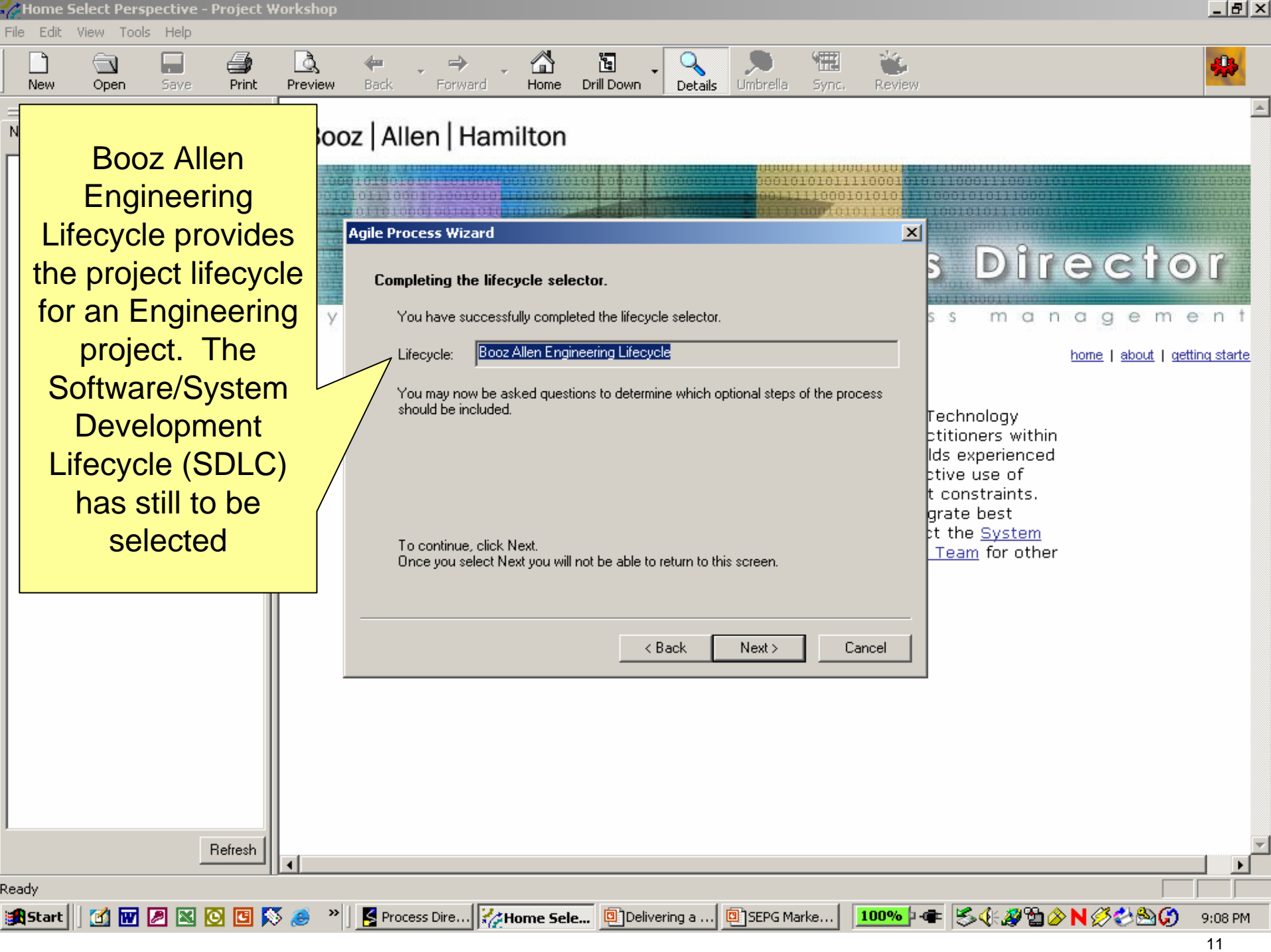
Yes

No

< Back Next > Cancel

By PM answering yes the tool has just eliminated 3 of the 7 currently available lifecycles. All non-engineering lifecycles are now excluded.

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Booz Allen Engineering Lifecycle provides the project lifecycle for an Engineering project. The Software/System Development Lifecycle (SDLC) has still to be selected

Agile Process Wizard

Completing the lifecycle selector.

You have successfully completed the lifecycle selector.

Lifecycle:

You may now be asked questions to determine which optional steps of the process should be included.

To continue, click Next.
Once you select Next you will not be able to return to this screen.

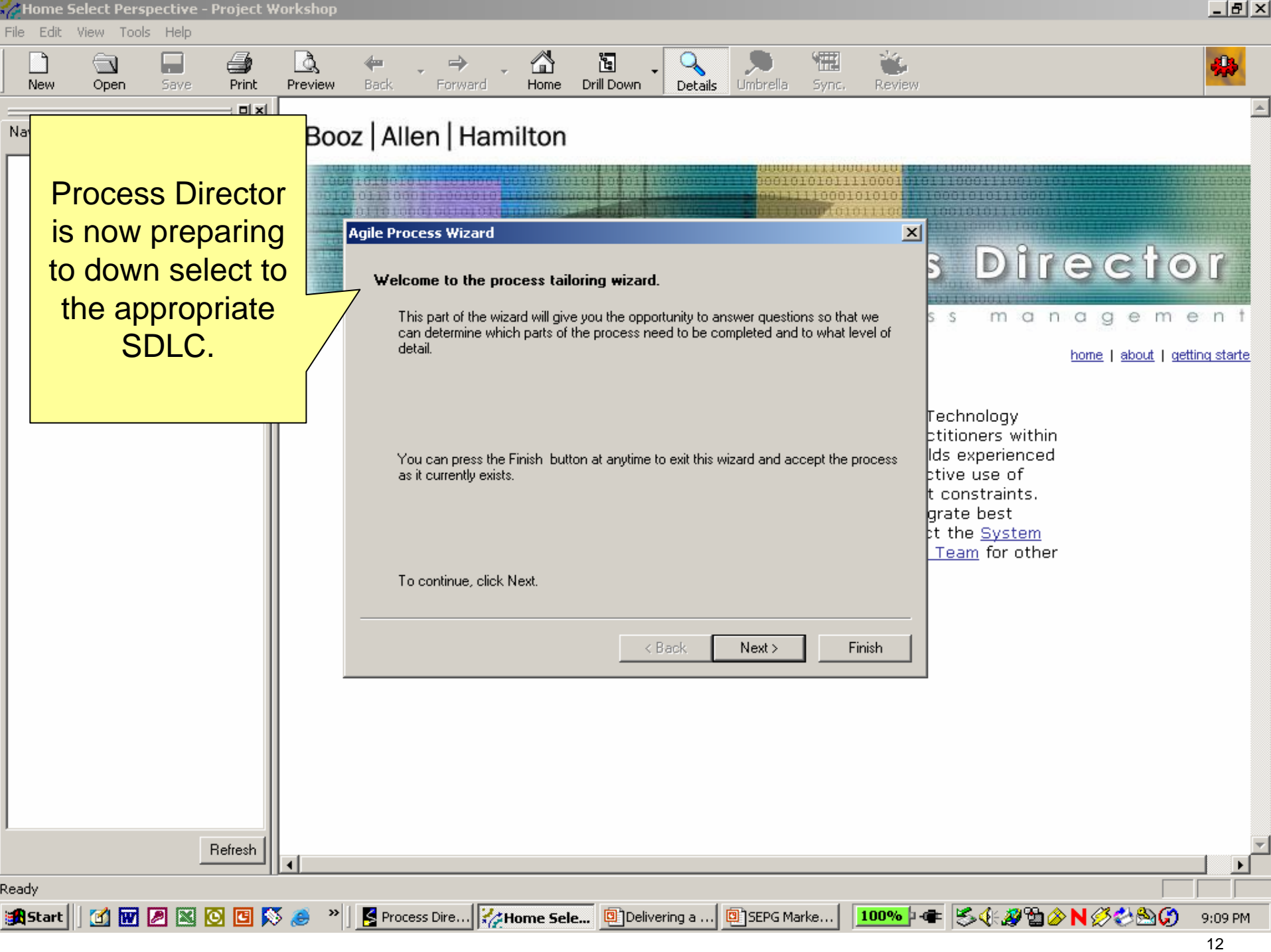
< Back Next > Cancel

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Process Director is now preparing to down select to the appropriate SDLC.

Agile Process Wizard

Welcome to the process tailoring wizard.

This part of the wizard will give you the opportunity to answer questions so that we can determine which parts of the process need to be completed and to what level of detail.

You can press the Finish button at anytime to exit this wizard and accept the process as it currently exists.

To continue, click Next.

< Back Next > Finish

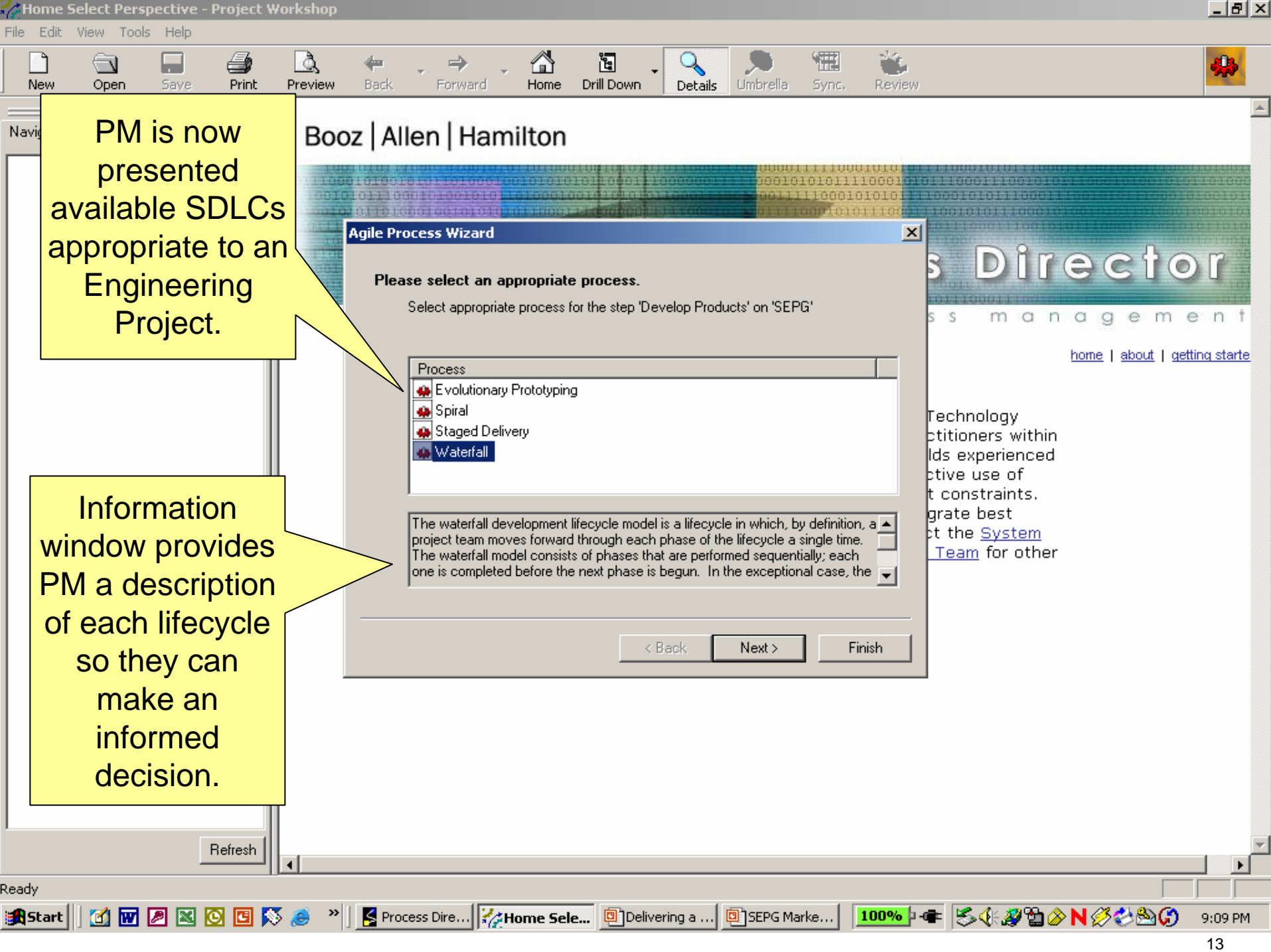
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Ready



PM is now presented available SDLCs appropriate to an Engineering Project.

Information window provides PM a description of each lifecycle so they can make an informed decision.

Agile Process Wizard

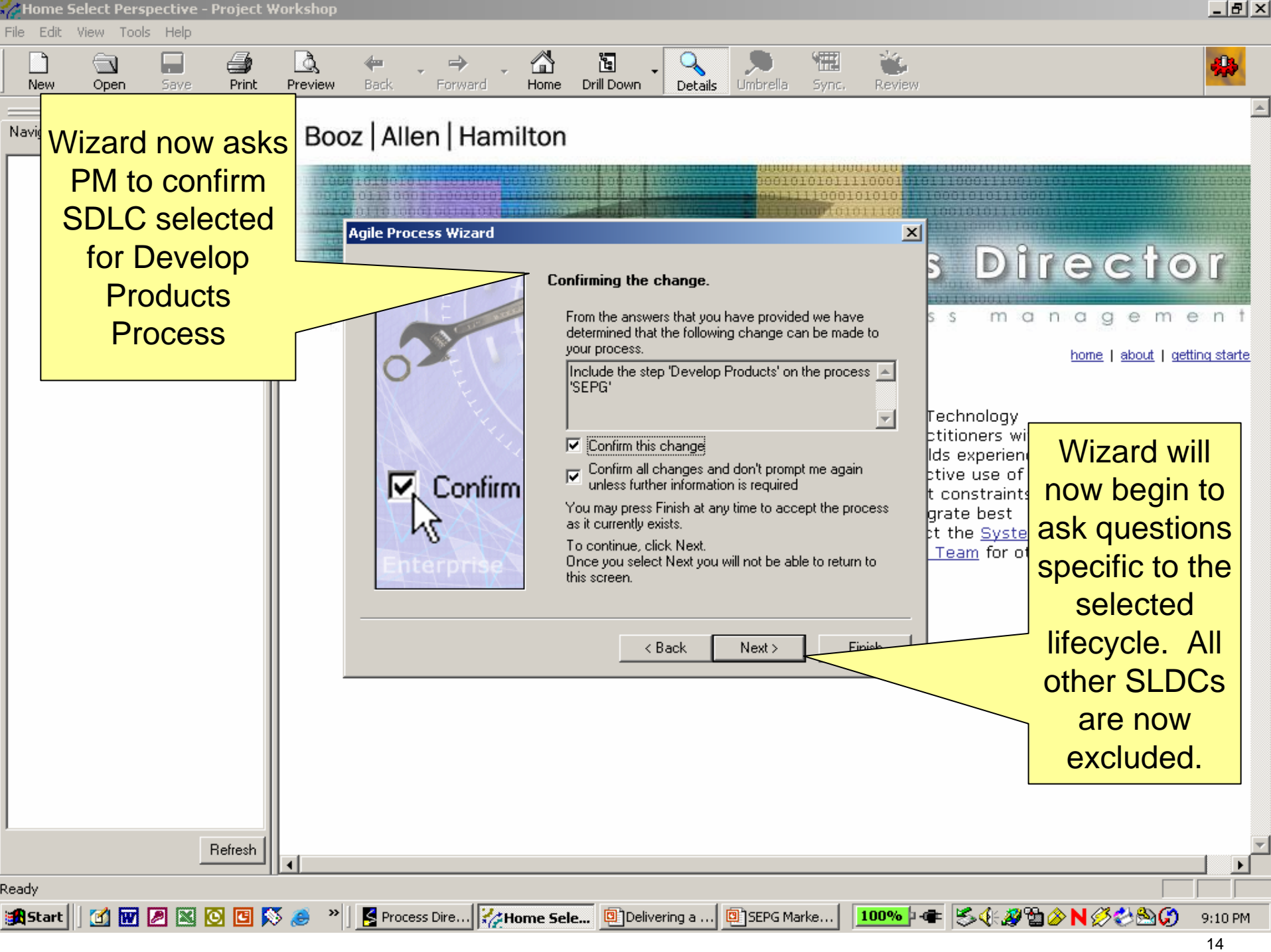
Please select an appropriate process.

Select appropriate process for the step 'Develop Products' on 'SEPG'

Process
<input type="checkbox"/> Evolutionary Prototyping
<input type="checkbox"/> Spiral
<input type="checkbox"/> Staged Delivery
<input checked="" type="checkbox"/> Waterfall

The waterfall development lifecycle model is a lifecycle in which, by definition, a project team moves forward through each phase of the lifecycle a single time. The waterfall model consists of phases that are performed sequentially; each one is completed before the next phase is begun. In the exceptional case, the

< Back Next > Finish



Wizard now asks PM to confirm SDLC selected for Develop Products Process

Wizard will now begin to ask questions specific to the selected lifecycle. All other SLDCs are now excluded.

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Agile Process Wizard

Confirming the change.

From the answers that you have provided we have determined that the following change can be made to your process.

Include the step 'Develop Products' on the process 'SEPG'

- Confirm this change
- Confirm all changes and don't prompt me again unless further information is required

You may press Finish at any time to accept the process as it currently exists.

To continue, click Next.
Once you select Next you will not be able to return to this screen.

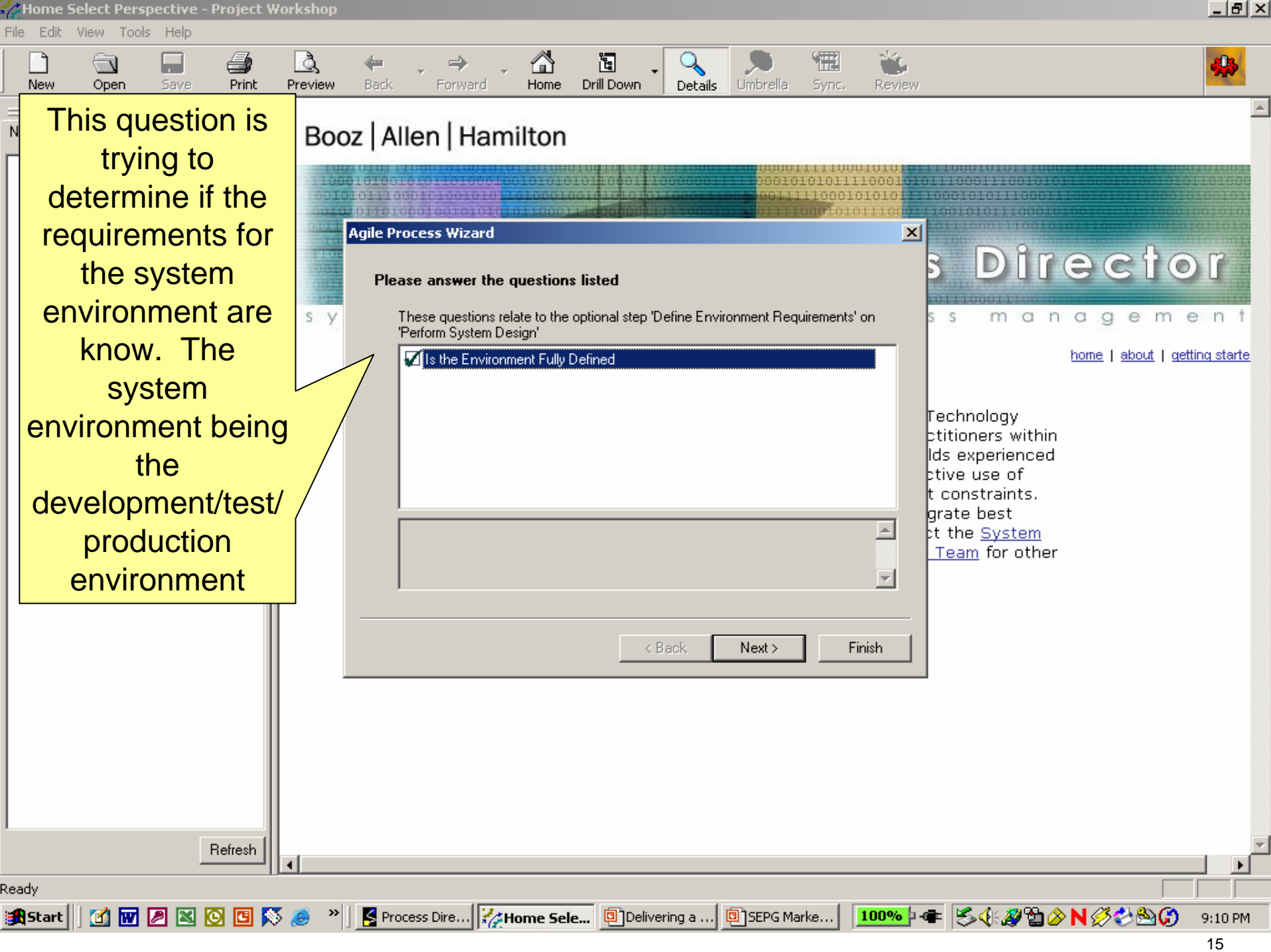
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Next >

Finish

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Ready



This question is trying to determine if the requirements for the system environment are known. The system environment being the development/test/production environment

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Agile Process Wizard

Please answer the questions listed

These questions relate to the optional step 'Define Environment Requirements' on 'Perform System Design'

Is the Environment Fully Defined

< Back Next > Finish

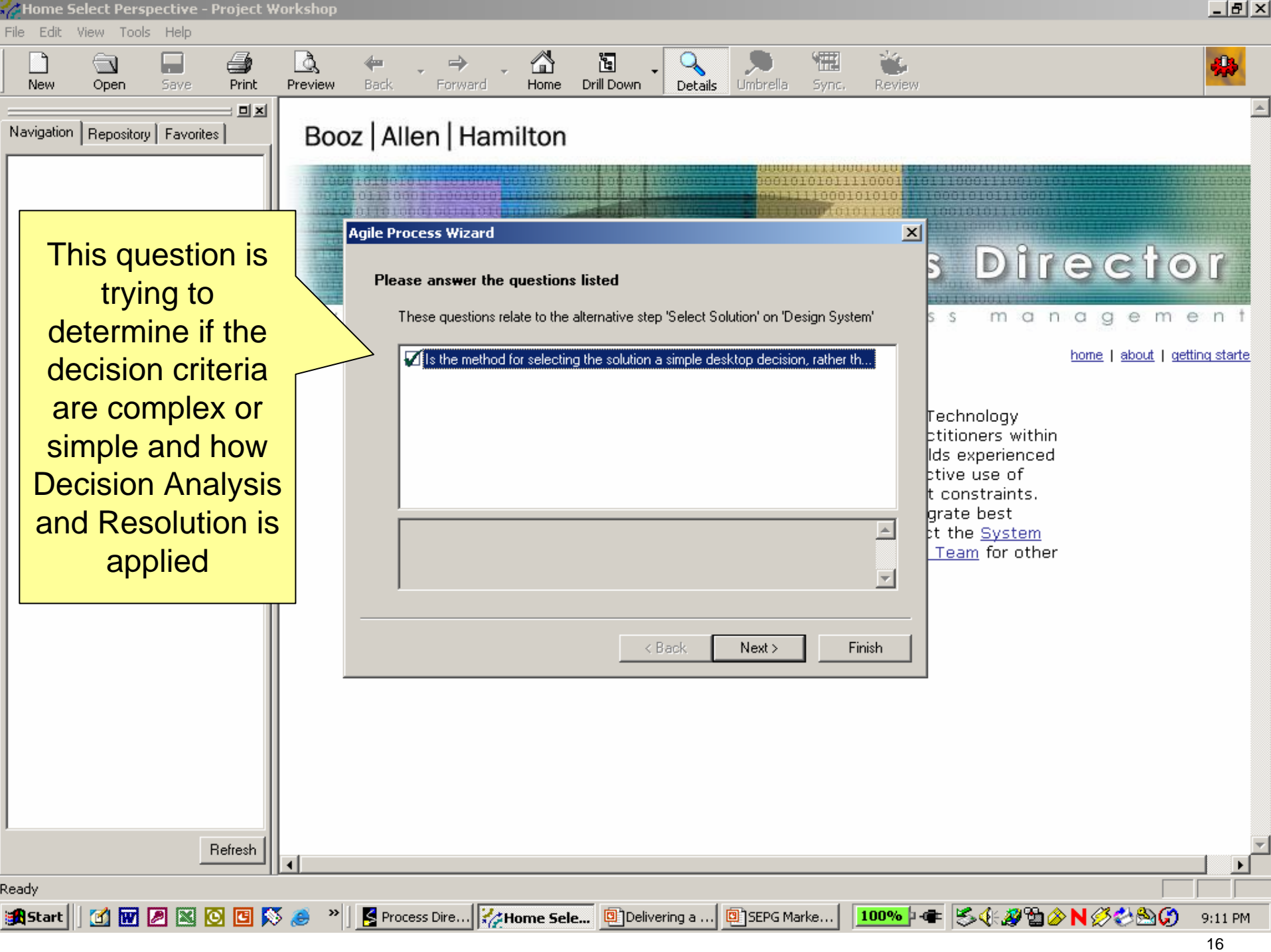
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Technology practitioners within the industry have experienced the effective use of agile development practices. To integrate best practices, contact the [System Team](#) for other

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Agile Process Wizard

Please answer the questions listed

These questions relate to the alternative step 'Select Solution' on 'Design System'

Is the method for selecting the solution a simple desktop decision, rather th...

< Back Next > Finish

This question is trying to determine if the decision criteria are complex or simple and how Decision Analysis and Resolution is applied

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Agile Process Wizard

Completing the agile process wizard.

You have successfully completed the agile process

We will now create the new project based on your specifications.

To close this wizard, click Finish.

< Back **Finish** Cancel

The wizard now has sufficient information to build the PDP based on the lifecycle chosen.

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Iteration Wizard

Welcome to the iteration wizard.

This wizard helps you to define iterations within the project.

We will give you the opportunity to run any iteration wizards that are attached to iterations within the project that can be defined at project start-up.

You can press the Finish button at anytime to exit this wizard and accept the process as it currently exists.

To continue, click Next.

< Back **Next >** Finish

The Wizard will now lead the PM through process elements that can be repeated during the course of a project to determine the number of iterations.

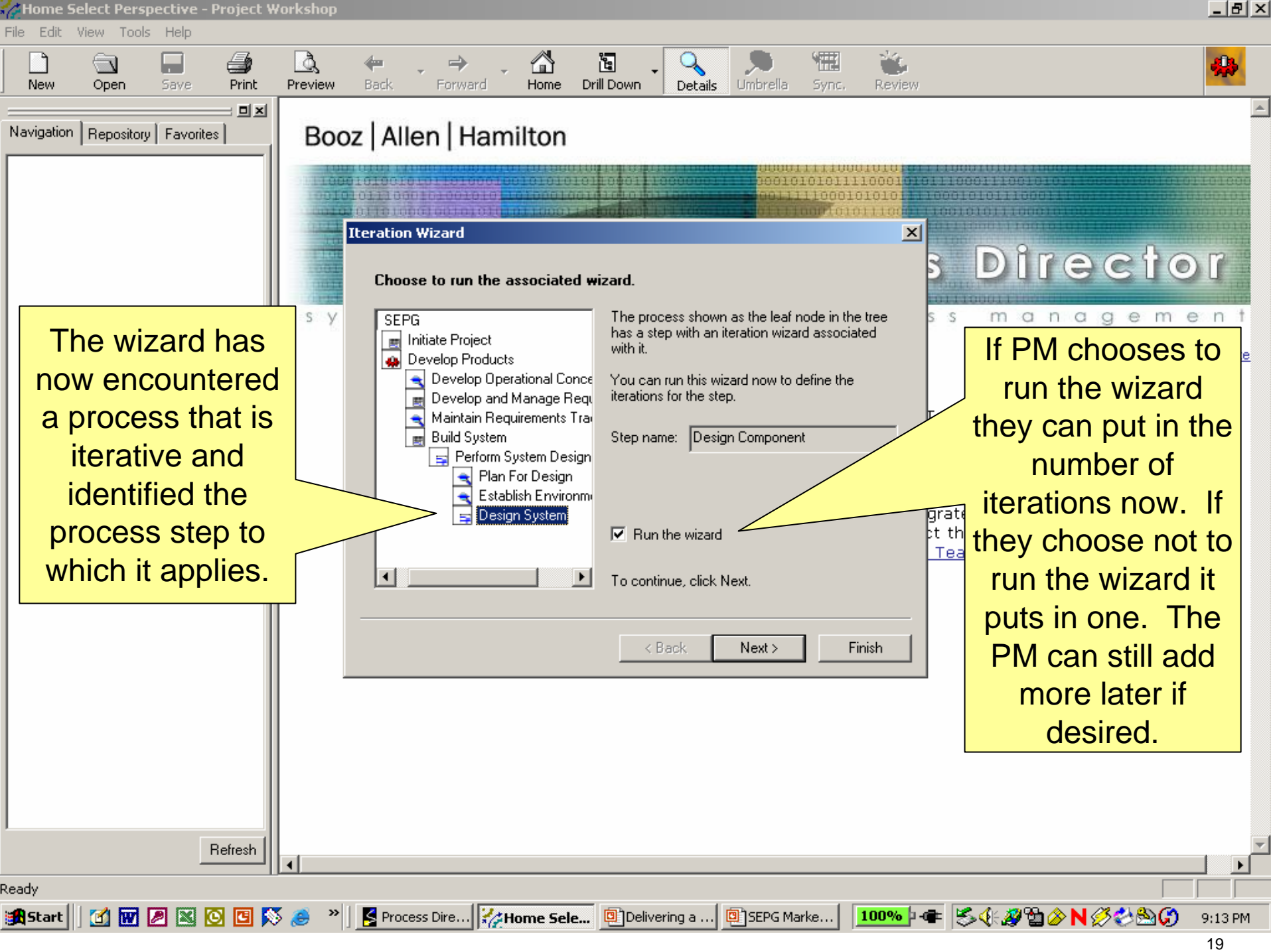
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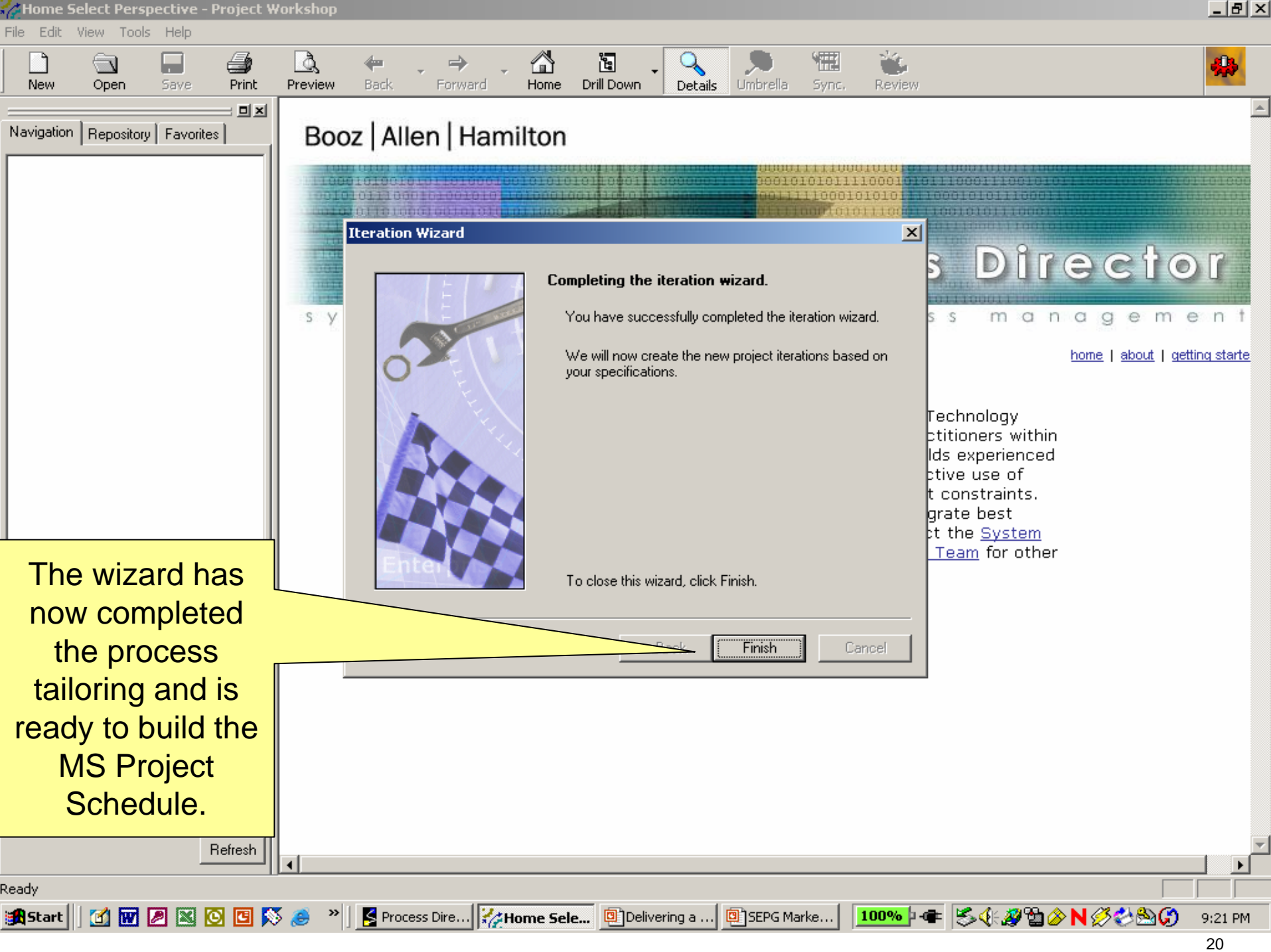
Technology practitioners within the industry have always experienced the effective use of project management tools. However, the use of project management tools is not always the best. To integrate best practices into the System Team for other

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The wizard has now encountered a process that is iterative and identified the process step to which it applies.

If PM chooses to run the wizard they can put in the number of iterations now. If they choose not to run the wizard it puts in one. The PM can still add more later if desired.



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Iteration Wizard

Completing the iteration wizard.

You have successfully completed the iteration wizard.

We will now create the new project iterations based on your specifications.

To close this wizard, click Finish.

Finish Cancel

The wizard has now completed the process tailoring and is ready to build the MS Project Schedule.

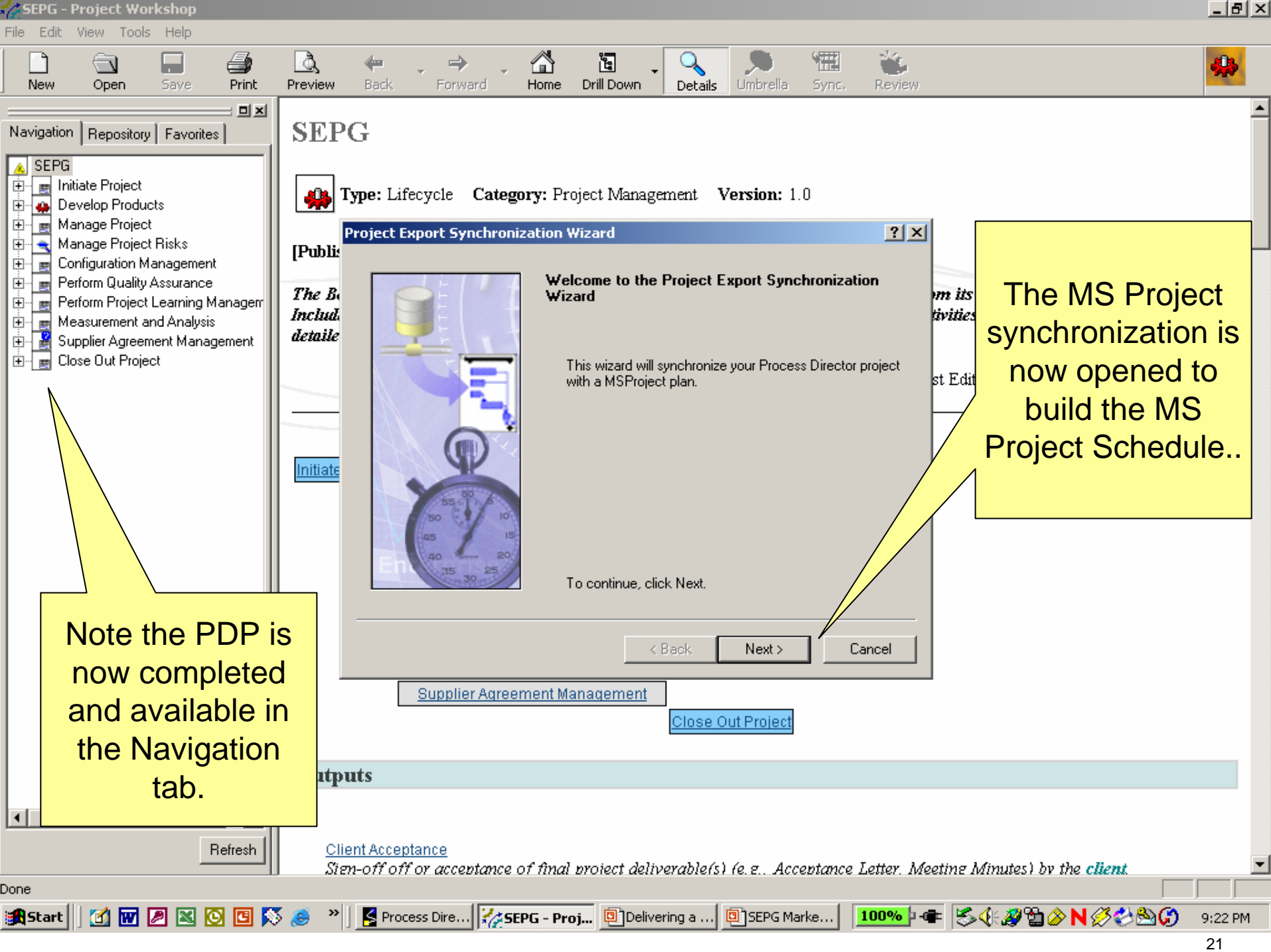
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SEPG

Type: Lifecycle Category: Project Management Version: 1.0

Project Export Synchronization Wizard

Welcome to the Project Export Synchronization Wizard

This wizard will synchronize your Process Director project with a MSProject plan.

To continue, click Next.

< Back Next > Cancel

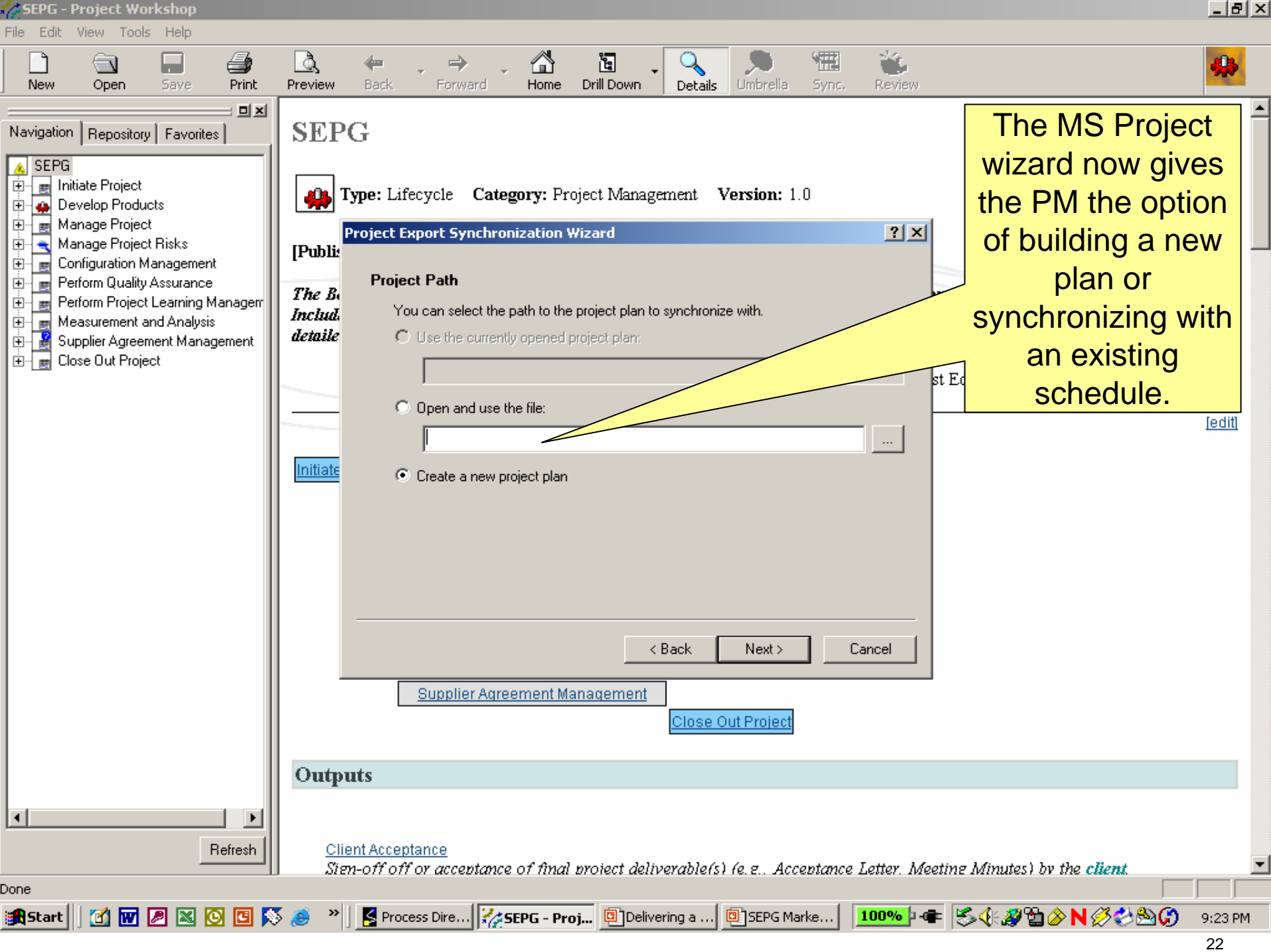
Note the PDP is now completed and available in the Navigation tab.

The MS Project synchronization is now opened to build the MS Project Schedule..

[Supplier Agreement Management](#)

[Close Out Project](#)

[Client Acceptance](#)
Stem-off off or acceptance of final project deliverable(s) (e.g., Acceptance Letter, Meeting Minutes) by the client



SEPG

Type: Lifecycle **Category:** Project Management **Version:** 1.0

Project Export Synchronization Wizard [?] [X]

Project Path

You can select the path to the project plan to synchronize with.

Use the currently opened project plan:

Open and use the file:

Create a new project plan

< Back Next > Cancel

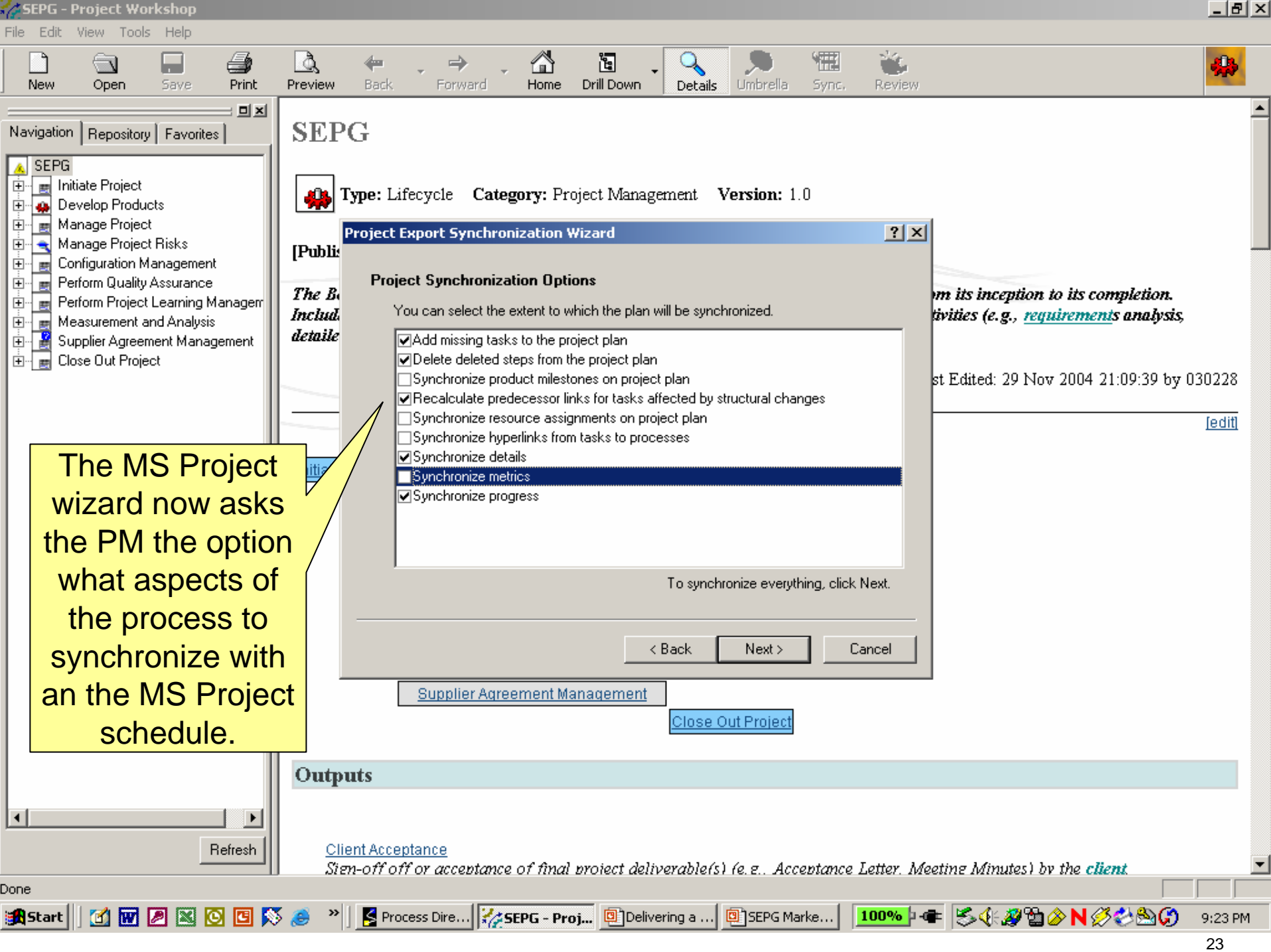
The MS Project wizard now gives the PM the option of building a new plan or synchronizing with an existing schedule.

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The MS Project wizard now asks the PM the option what aspects of the process to synchronize with an the MS Project schedule.

SEPG

Type: Lifecycle **Category:** Project Management **Version:** 1.0

[Public]
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Project Export Synchronization Wizard

Project Synchronization Options

You can select the extent to which the plan will be synchronized.

- Add missing tasks to the project plan
- Delete deleted steps from the project plan
- Synchronize product milestones on project plan
- Recalculate predecessor links for tasks affected by structural changes
- Synchronize resource assignments on project plan
- Synchronize hyperlinks from tasks to processes
- Synchronize details
- Synchronize metrics
- Synchronize progress

To synchronize everything, click Next.

< Back Next > Cancel

[Supplier Agreement Management](#)

[Close Out Project](#)

Outputs

[Client Acceptance](#)

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 - Develop Products
 - Manage Project
 - Manage Project Risks
 - Configuration Management
 - Perform Quality Assurance
 - Perform Project Learning Manager
 - Measurement and Analysis
 - Supplier Agreement Management
 - Close Out Project

Refresh


SEPG

Type: Lifecycle **Category:** Project Management **Version:** 1.0

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Initiate

Project Export Synchronization Wizard



Calculate Synchronization Items

You must now discover what needs to be synchronized.

Based on the options you have chosen the selected project plan must be examined to decide what parts require synchronization.

The synchronization may take several minutes to complete. To begin, click the Calculate button below.

Calculate

< Back Next > Cancel

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Outputs

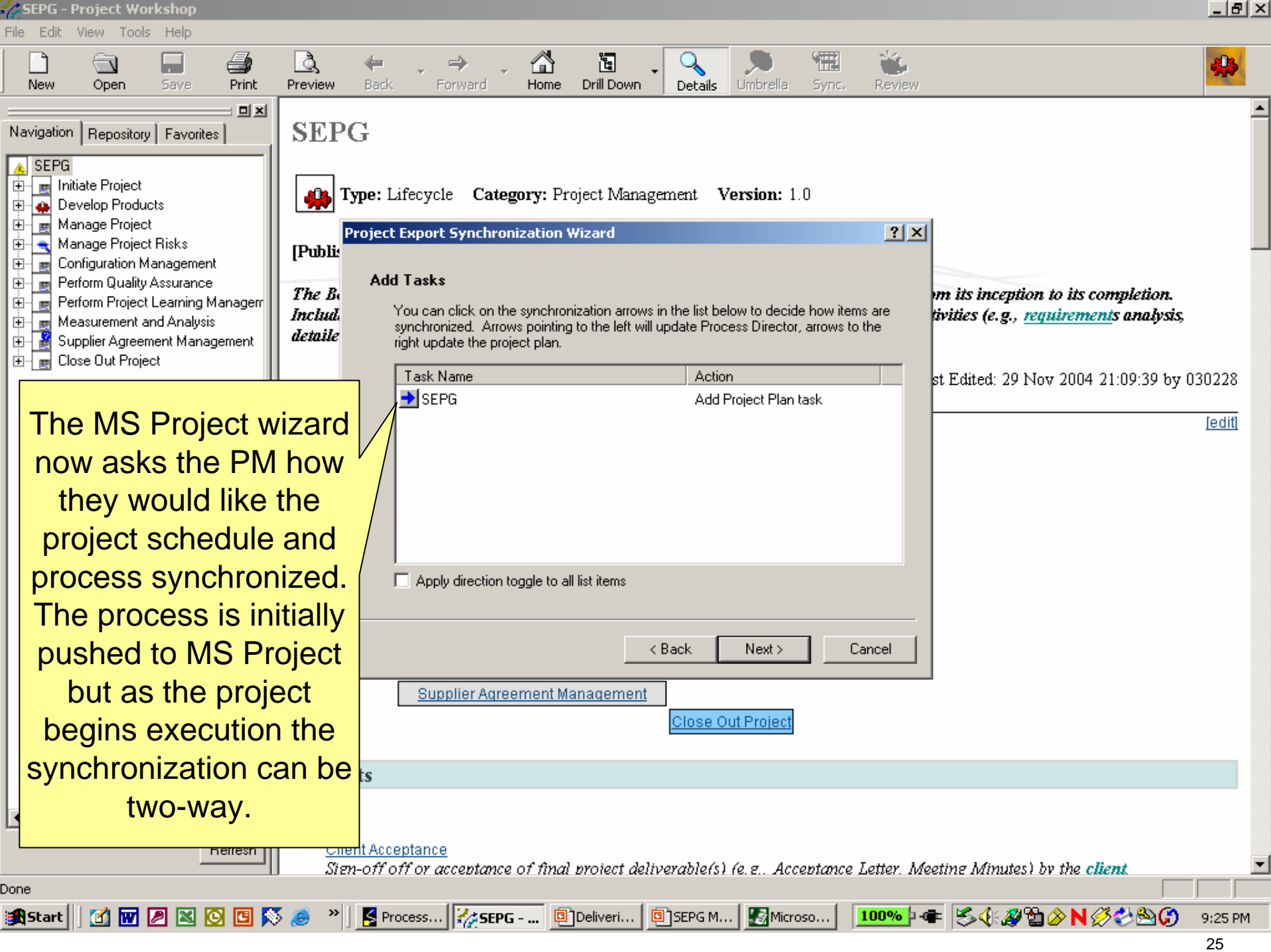
[Client Acceptance](#)
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The MS Project wizard now will calculate the MS Project schedule.

*from its inception to its completion.
activities (e.g., [requirements analysis](#),*

st Edited: 29 Nov 2004 21:09:39 by 030228

[edit](#)



The MS Project wizard now asks the PM how they would like the project schedule and process synchronized. The process is initially pushed to MS Project but as the project begins execution the synchronization can be two-way.

SEPG

Type: Lifecycle **Category:** Project Management **Version:** 1.0

Project Export Synchronization Wizard

Add Tasks

You can click on the synchronization arrows in the list below to decide how items are synchronized. Arrows pointing to the left will update Process Director, arrows to the right update the project plan.

Task Name	Action
→ SEPG	Add Project Plan task

Apply direction toggle to all list items

< Back Next > Cancel

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[Close Out Project](#)

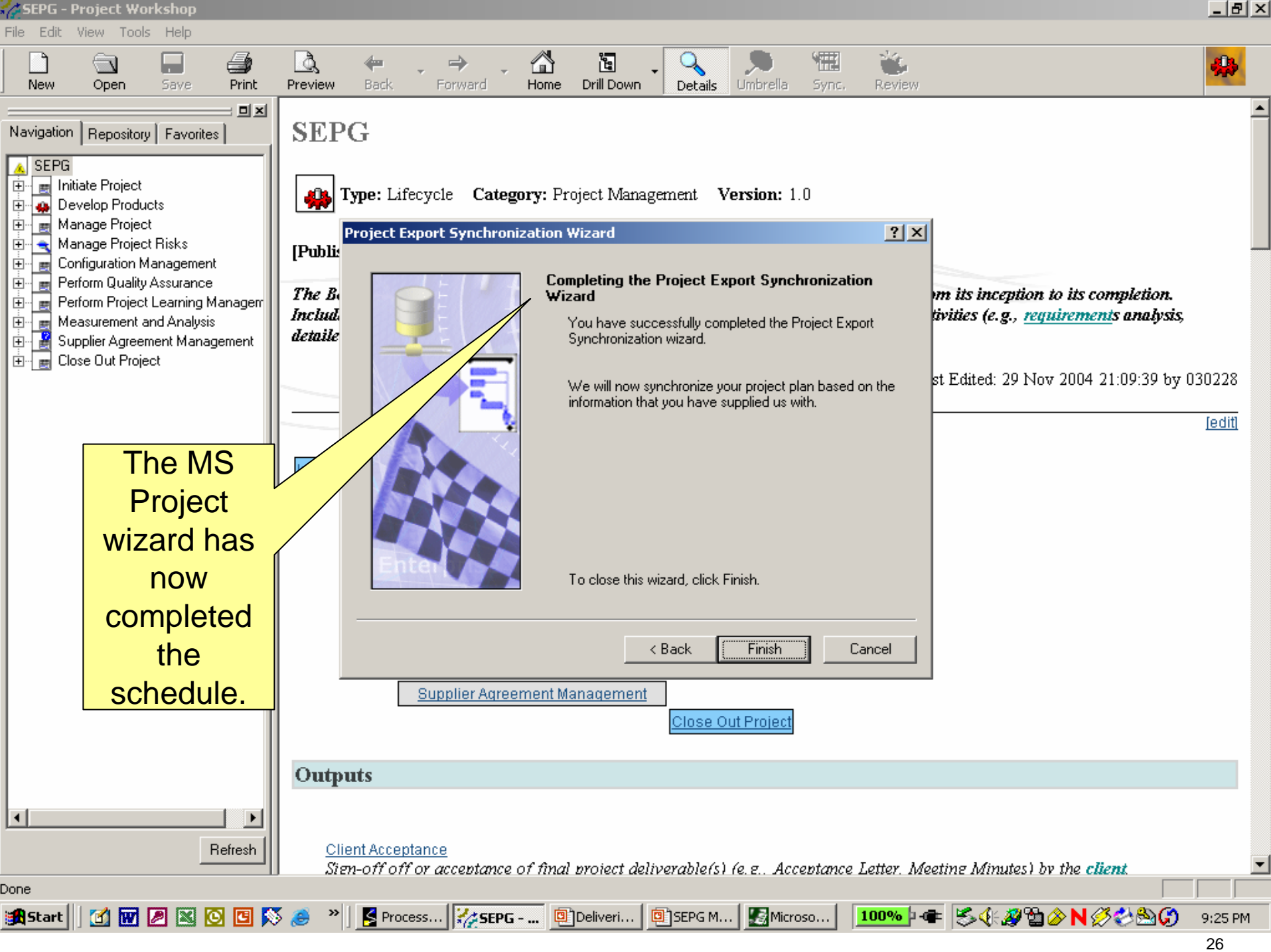
from its inception to its completion. Activities (e.g., requirements analysis,

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[Client Acceptance](#)

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SEPG

 **Type:** Lifecycle **Category:** Project Management **Version:** 1.0

Project Export Synchronization Wizard [?] [X]

Completing the Project Export Synchronization Wizard

You have successfully completed the Project Export Synchronization wizard.

We will now synchronize your project plan based on the information that you have supplied us with.

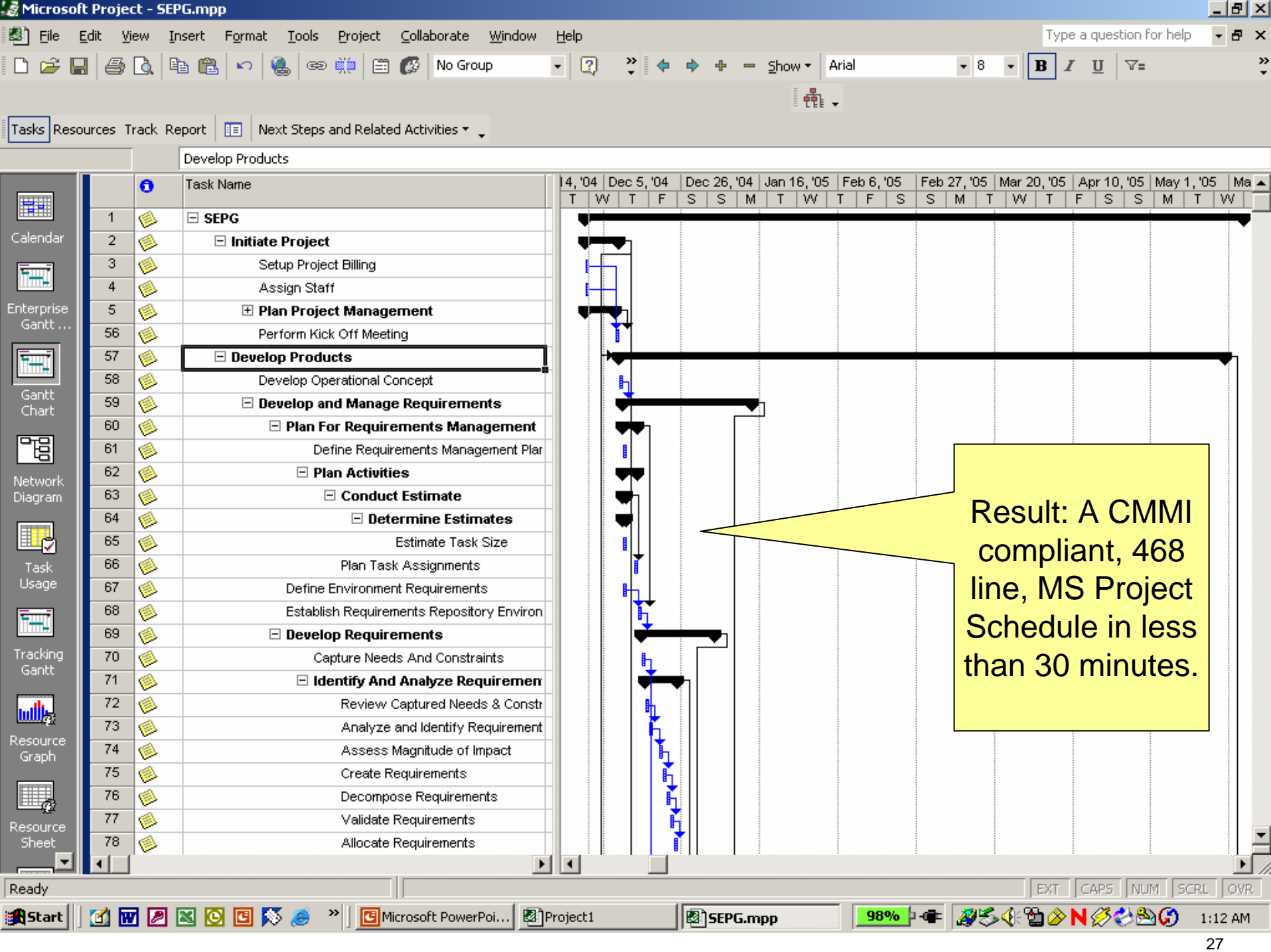
To close this wizard, click Finish.

< Back **Finish** Cancel

The MS Project wizard has now completed the schedule.

Outputs

[Client Acceptance](#)
*Stem-off off or acceptance of final project deliverable(s) (e.g., Acceptance Letter, Meeting Minutes) by the **client***



Result: A CMMI compliant, 468 line, MS Project Schedule in less than 30 minutes.

In Closing

- ▶ OSP designed to support rapid planning and model compliance
- ▶ PDP easily and quickly tailored from OSP
- ▶ Process supports planning and development of initial project plan