knowledge16
May 15–20, 2016 • Mandalay Bay • Las Vegas, NV

Lab Guide

SDLC: Agile Software Development and Test Management

Simon Morris & Mike Mortimer

Default Login / Password:

admin / Knowledge16

itil / Knowledge16

employee / Knowledge16

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User Personas

User	Role	Expectations
Abel Tuter	Business User	Has a great idea for the business. Wants to know the progress of his idea and whether it will be built and deployed, or rejected.
Barbara Hindley	Demand and Project Manager	Needs a method of managing demand from the business. Works with stakeholders and has to deal with competing priorities.
	Test and Release Manager	Receives completed work from the development team and is responsible for the transition to production systems. Is interested in the quality assurance aspect of the work. Coordinates User Acceptance Testing.
Bart Hachey	Stakeholder	Provides input into the Demand Management process from a business perspective. Has also volunteered to help test new features before they are released into production.
Fatima Saylors	ScrumMaster	Helps the team understand how to align their work with the business. Also concerned with increasing the predictability of the team output.
	Developer	Wants a clear definition of feature requirements and what is expected of the team in the next development sprint. Interested in visual ways of working and collaboration

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Lab Overview

In this lab Abel Tuter will submit an idea that he feels will be valuable to his organization. Barbara, the Demand and Project Manager, will review the idea and have a conversation with Abel to understand the details.

Bart Hachey, a business stakeholder, is asked for his feedback on whether the idea deserves investment.

Barbara will then create a new Project to manage the work of implementing the idea. The project is handed to Fatima, the ScrumMaster, to create scrum stories that define the work required to build the new feature.

Fatima (and team) plans their development cycle and produces an amazing new feature.

Barbara, now responsible for the transition to production, asks Bart and Abel to help test the software to ensure it meets the business requirements.

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Lab 1.0 Manage Demand

Lab Goal

This lab is about an idea generated by a business user named Abel Tuter.

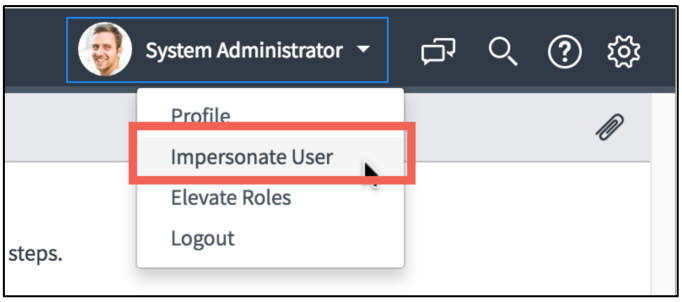
Abel has an idea that he thinks will be valuable in a future release of the Room Booking system. Using the company Service Catalog, he submits this idea and has a conversation with Barbara Hindley, the Demand and Project Manager.

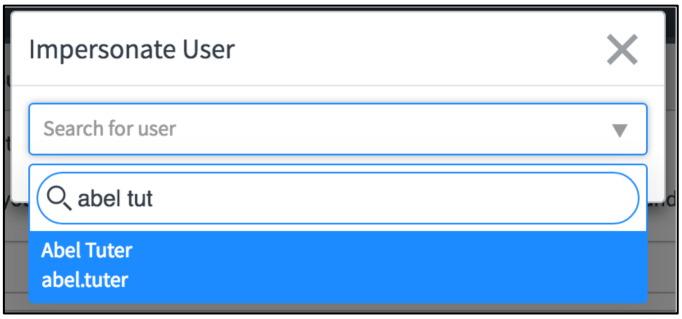
Barbara agrees that this idea has some merit and will consider it alongside other important ideas that have been submitted by other business users.

To ensure that the development team is working on the most important items, Barbara uses the Assessment feature of Demand Management to get feedback from stakeholders.

Abel Tuter Creates an Idea

1. Log on to your lab instance.
2. Impersonate the user **Abel Tuter**.



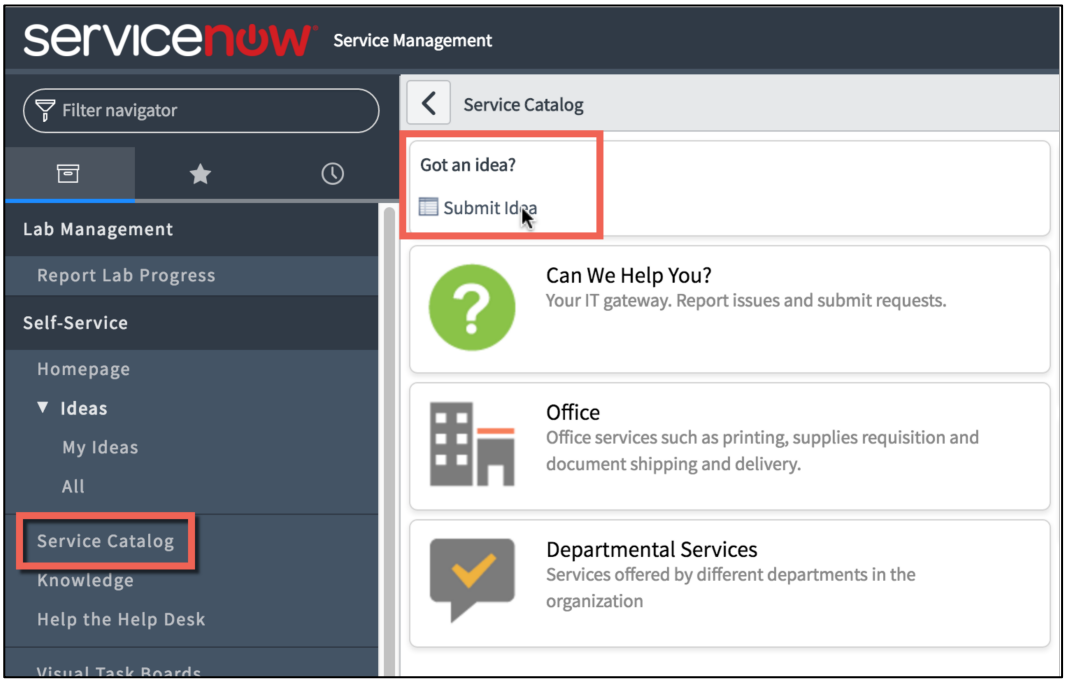


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3. As Abel Tuter, a business user, you have a new idea for the company, a Room Booking system that you think will be both cool to have and valuable for your coworkers.

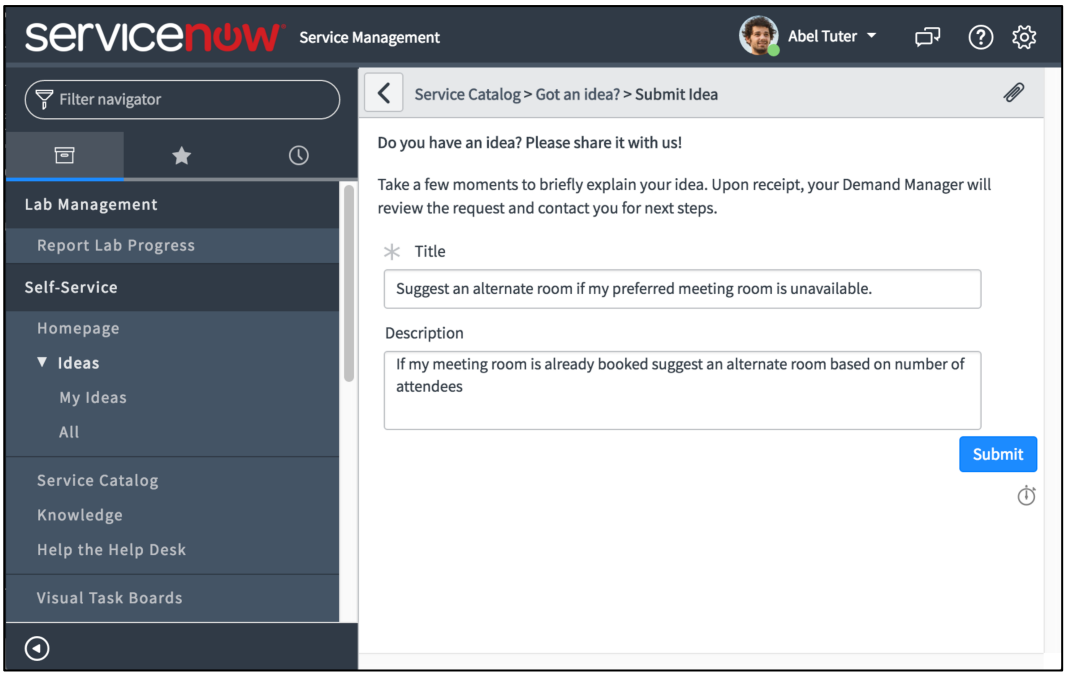
   You want to submit this idea and have it dealt with by the Development team.

   Navigate to **Self-Service > Service Catalog.** Click **Submit idea**.



4. Type a Title and Description for the business idea (**Note**: The text used is not important. If you do not want to type the suggested text, just type “Test” into both fields).

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Title: **Suggest an alternate room if my preferred meeting room is unavailable**
Description: **If my meeting room is already booked suggest an alternate room based on number of attendees**

5. Click **Submit**.

6. Navigate to **Self-Service > Ideas > My Ideas** and confirm that your idea was submitted.

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Barbara Hindley Creates a Demand from the Idea

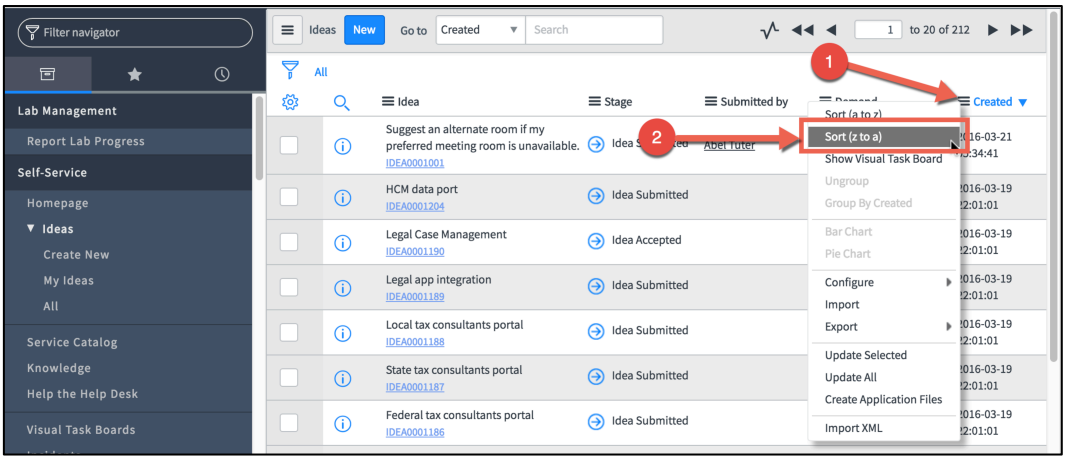
1. Impersonate user **Barbara Hindley**.

2. As Barbara Hindley, a Demand and Project Manager, you are responsible for responding to ideas submitted by the business and working with stakeholders to determine the risk and value of each idea.

   Part of your job is to keep an eye on the list of incoming ideas and work with the business user to prepare the Idea for review by stakeholders.

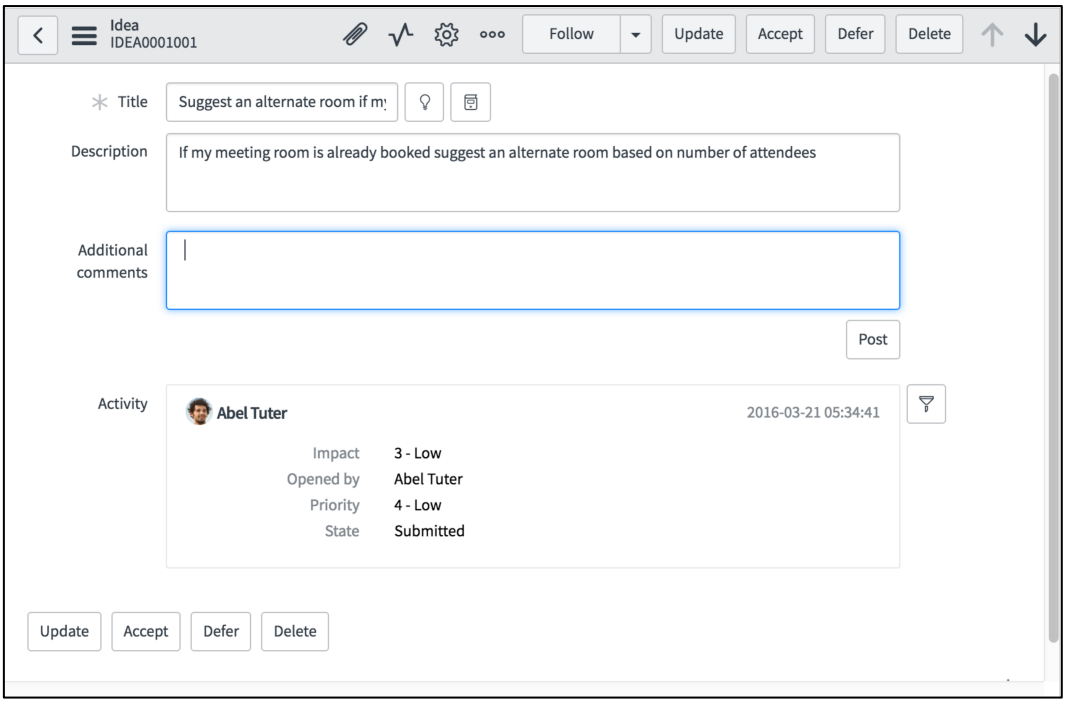
   Navigate to **Self-Service > Ideas > All**.

   Sort the list by **Created** date.



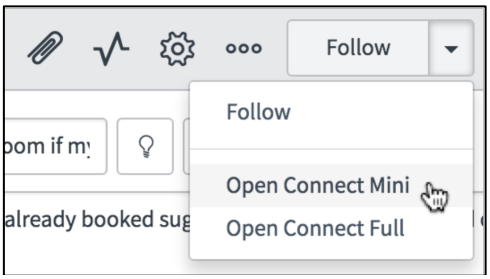
3. A new idea was submitted! Open the record to review the idea.

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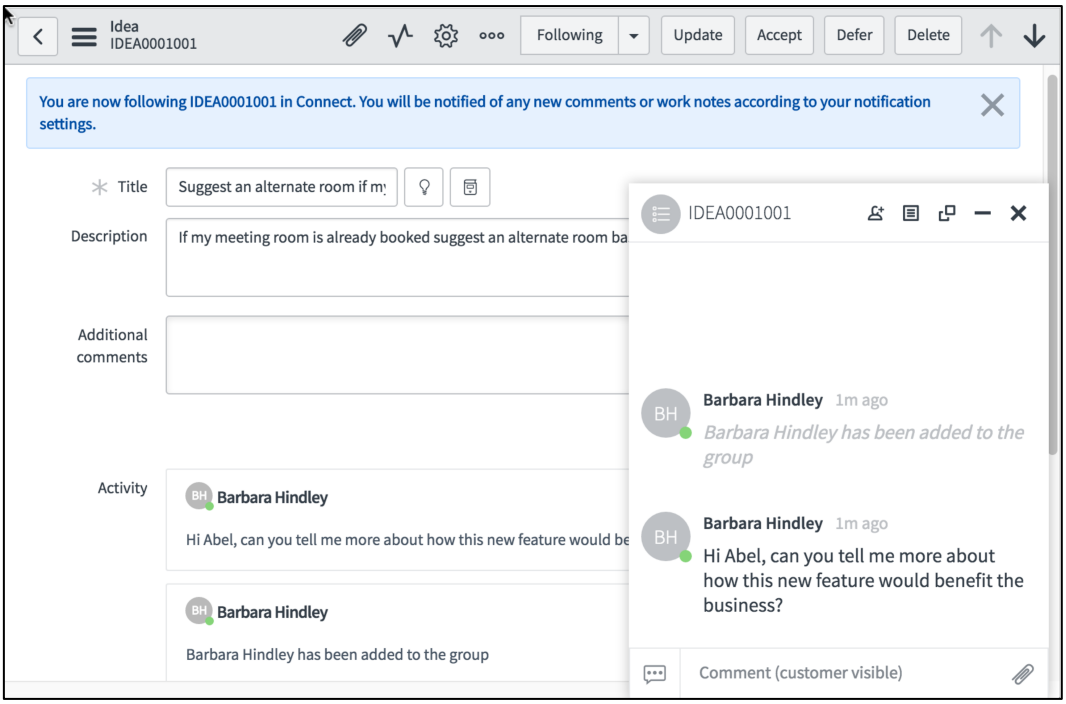


4. A conversation between Abel and Barbara would typically happen. Barbara would ask Abel for more details about his idea and would mature the idea to a point where she can make an **Accept** or **Defer** decision on it.

   ServiceNow Connect is a great way to collaborate on ideas. On the form header, click **Follow > Open Connect Mini**.



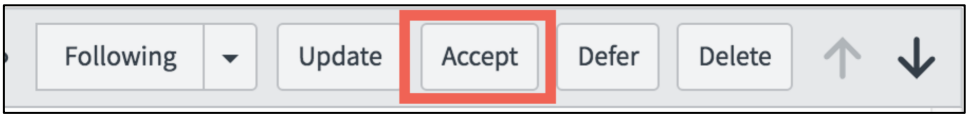
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As Barbara communicates with Abel through ServiceNow Connect, the conversation is captured into the Activity log of the Idea.

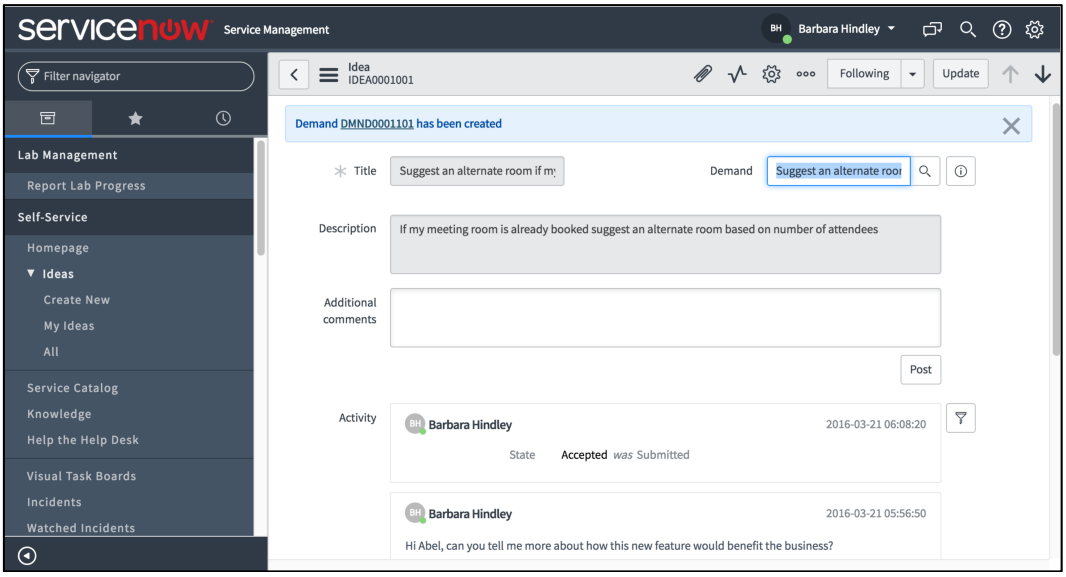
5. Great News for Abel!!! Barbara agrees that this Idea will bring value to the business and that Stakeholders should now rate this idea against others in the backlog.

   Click the **Accept** UI Action.



6. Note that the Idea now has an associated **Demand**. The informational message tells you which Demand request has been created from the Idea.

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Barbara Qualifies the Demand with Bart the Stakeholder

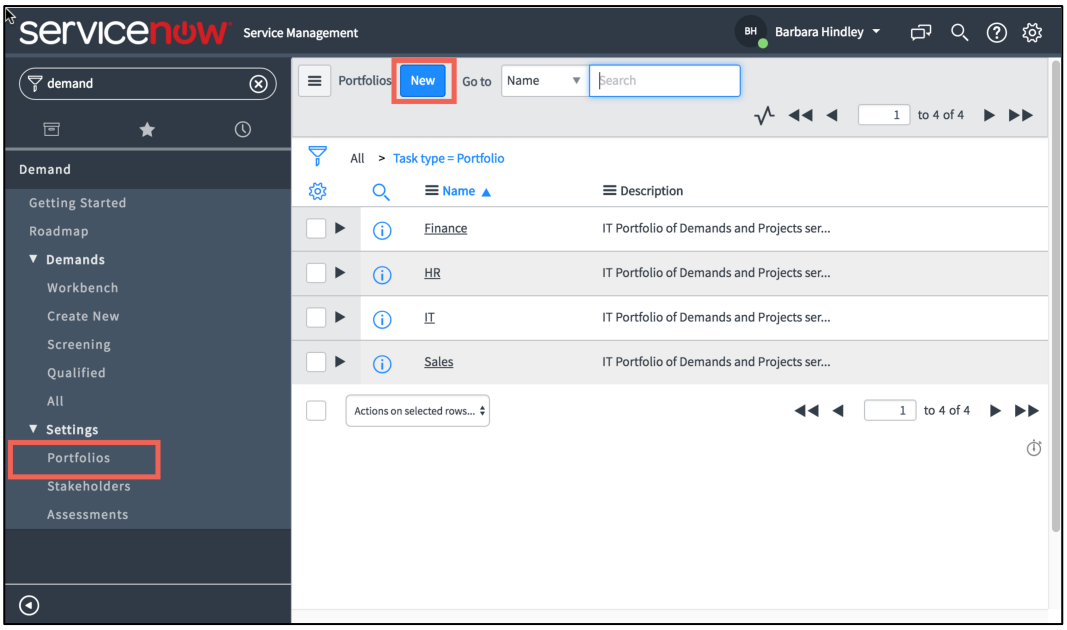
1. Barbara is now going to manage the Demand by working with the stakeholders across the business to correctly prioritize the backlog.

   Currently there is no Portfolio for Facilities, because no previous demands for this part of the organization were created.

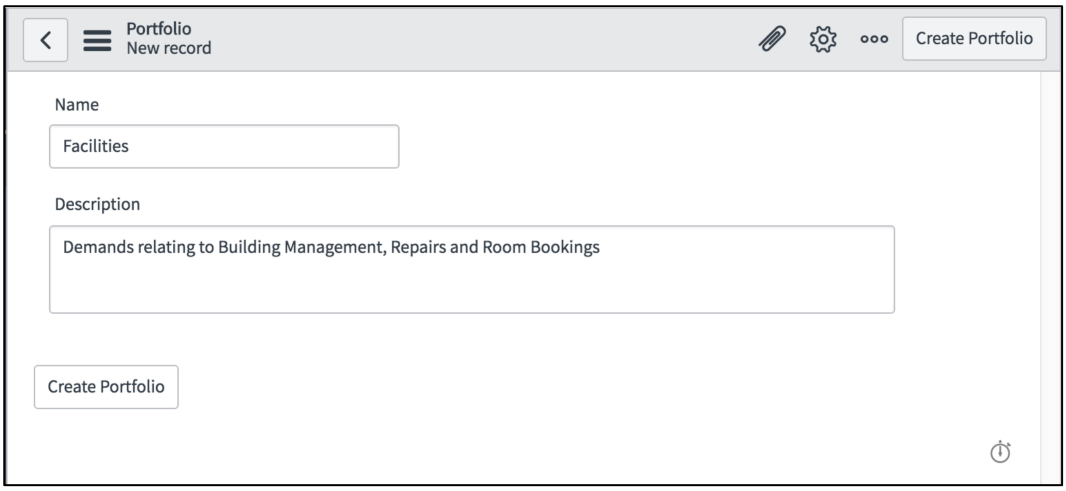
   Navigate to **Demand > Settings > Portfolios.**

   Click **New**.

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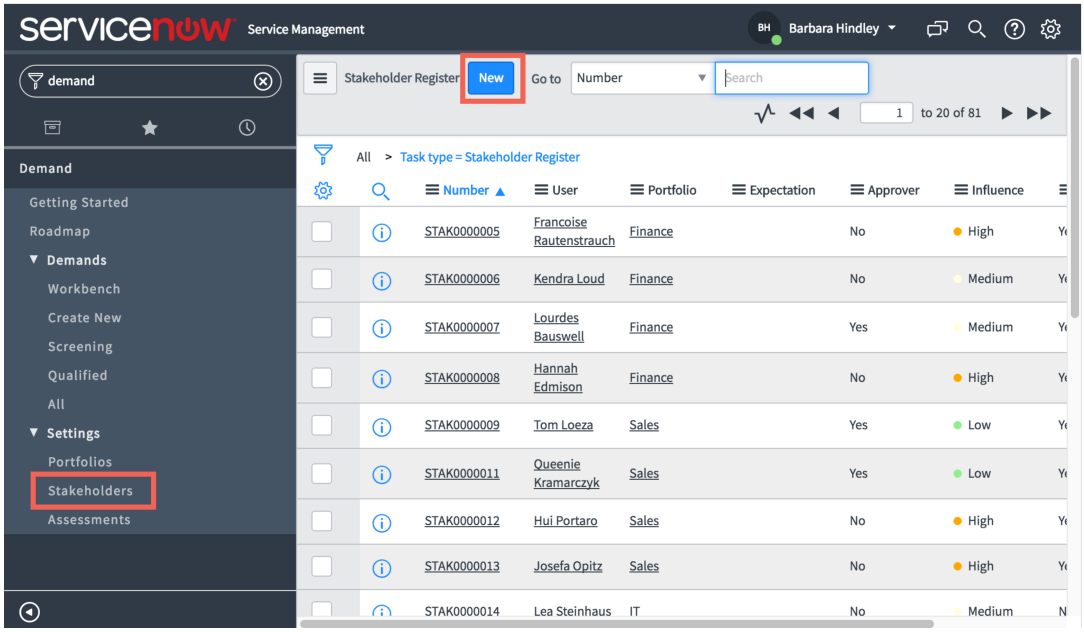
2. Create a new **Facilities Portfolio**.



3. We return to this form later to review the different Demands and Projects associated to this Portfolio.

4. Navigate to **Demand > Settings > Stakeholders**.

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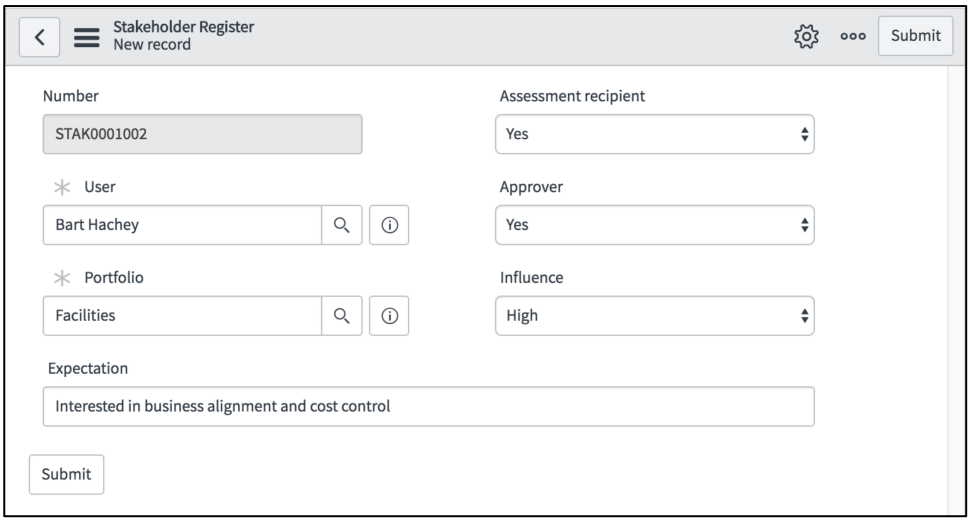


5. Create a new **Stakeholder** record for Bart Hachey, who is responsible for providing feedback for demands in the Facilities portfolio,

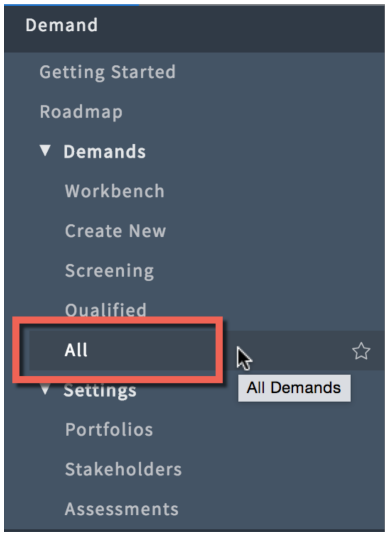
   Ensure the following fields are set:

   User: **Bart Hachey**
   Portfolio: **Facilities**
   Assessment Recipient: **Yes**
   Approver: **Yes**
   Influence: **High**

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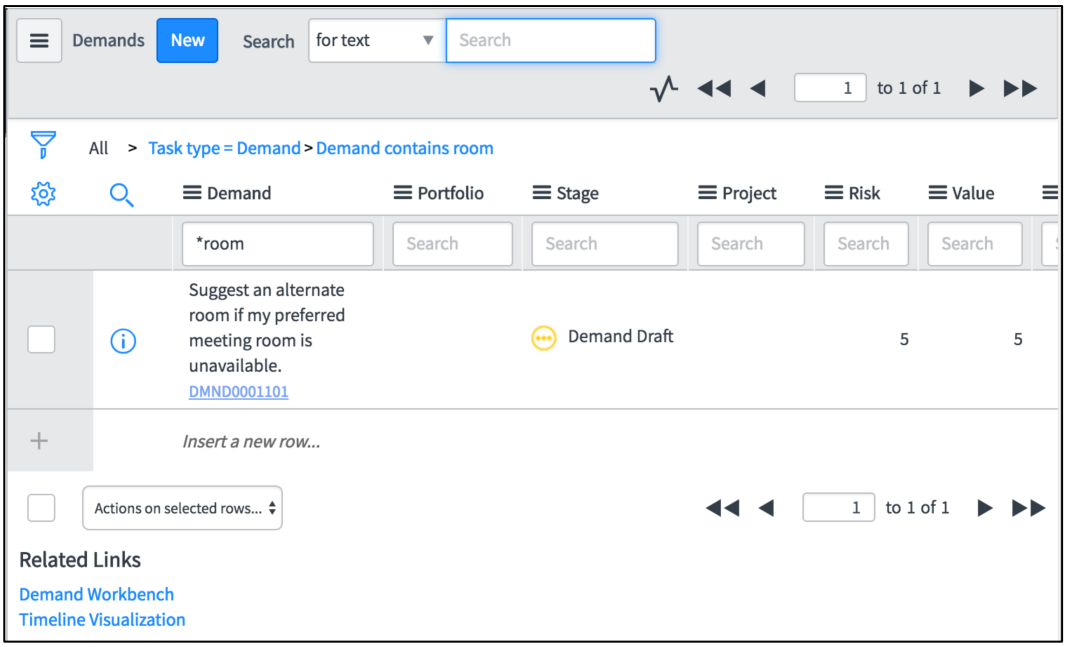


6. Navigate to **Demand > Demands > All**.



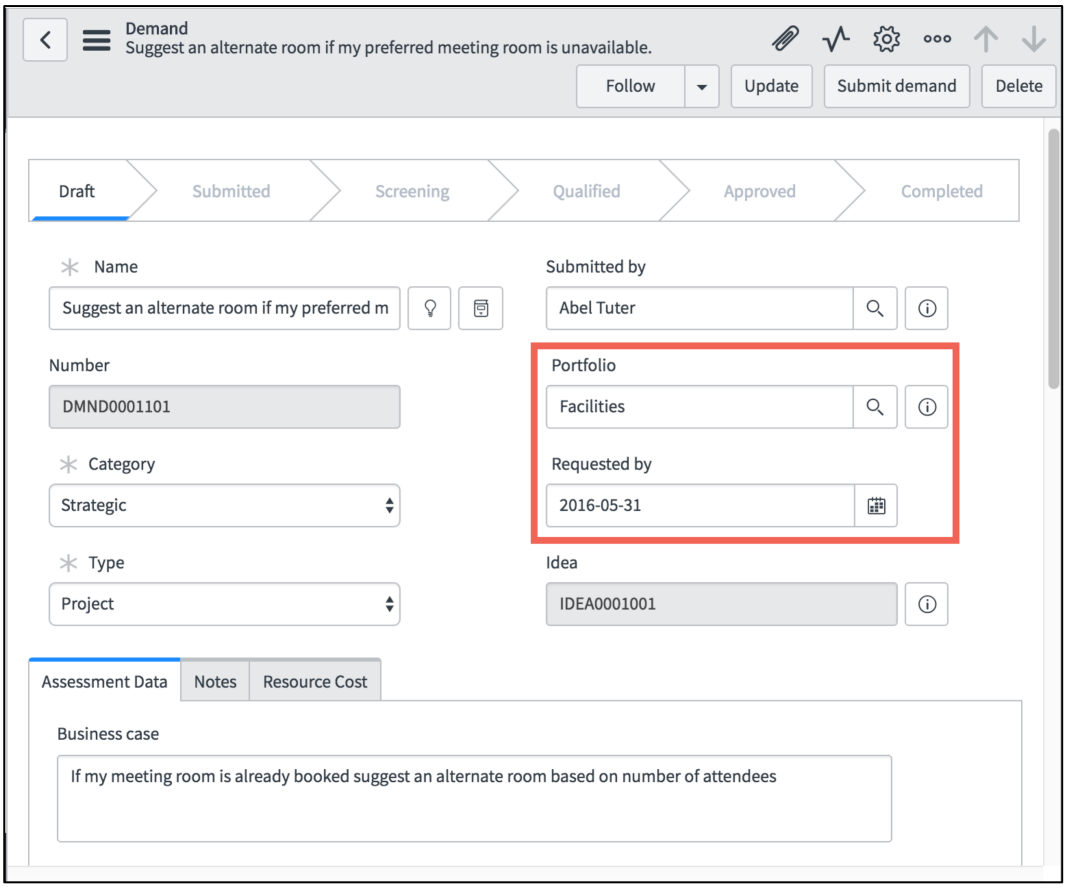
7. Locate the Demand that was approved earlier in this lab, either by using the Demand number or the short description of the Idea that Abel created.

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8. Open the Demand. Add more information to the Demand:

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Portfolio: **Facilities**
Requested by: **2016-05-31**

9. We now have enough information to move the Demand from **Draft** state to **Submitted** state.

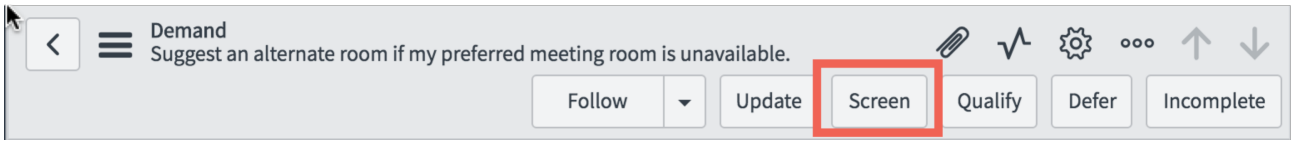
   Click the **Submit Demand** UI action.

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10. From the submitted state Barbara, the Demand and Project Manager can **Qualify** the demand if she feels that she does not need stakeholder input, or perhaps stakeholders are not available or willing to provide input.

    In the case of the Demand that Abel Tuter generated, she wants to get feedback from all Stakeholders associated to the Facilities portfolio (only Bert Hachey currently).

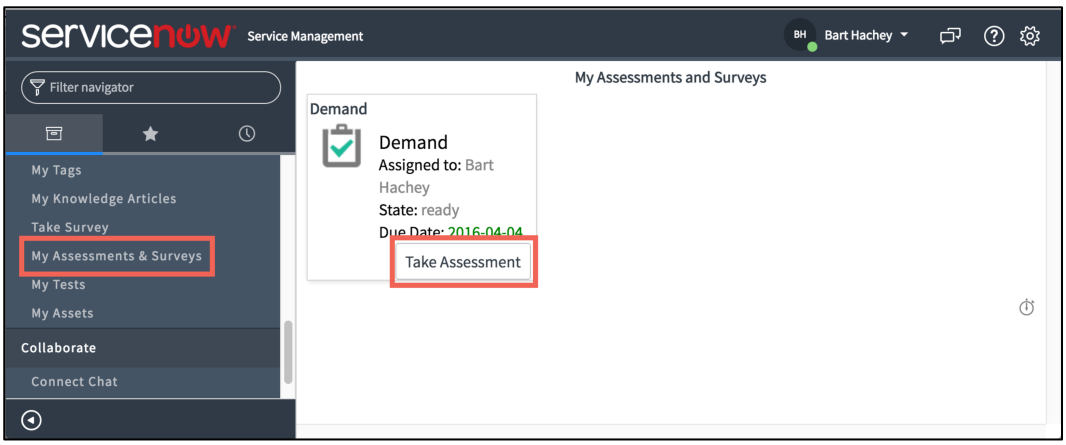
    Click **Screen** to send an Assessment to Bert, which will be used to help understand the values of this demand.



11. Impersonate user Bart Hachey.

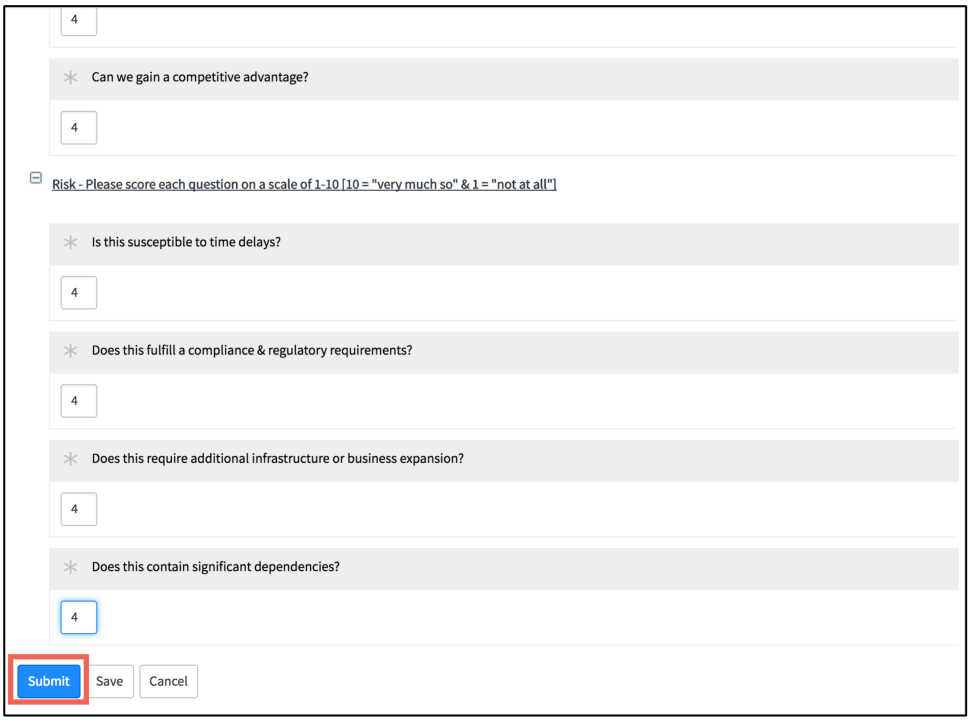
    As Bart, a stakeholder for Demands and Projects relating to the Facilities part of the organization, you expect to have input into the process of demand prioritization and project selection.

    Navigate to **Self-Service > My Assessments and Surveys** and click **Take Assessment** to provide your feedback on the demand.



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12. Provide answers to the questions using values between 1 and 10.



After answering all of the questions, click **Submit**.

13. Impersonate user **Barbara Hindley**.

Now that all stakeholders have provided feedback via the Assessment engine you (as Barbara Hindley) are able to view this demand in the context of others on the Demand Workbench.

Barbara attends her weekly stakeholder meeting, attended by Bart and the other stakeholders from different departments.

Navigate to **Demand > Demands > Qualified**.

14. Open the Demand record relating to Abel Tuter's idea.

Note that the state has automatically transitioned to **Qualified** as all stakeholder assessments have been completed.

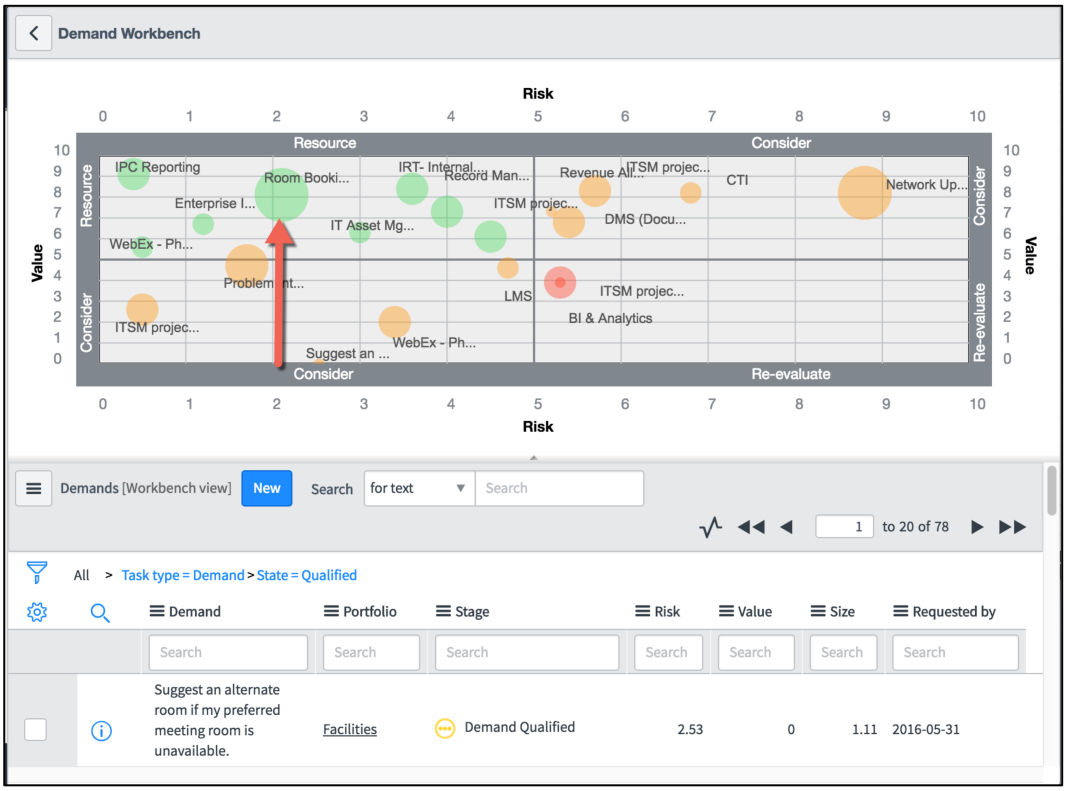
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15. Navigate to **Demand > Demands > Workbench**.

    In the stakeholder meeting, a conversation takes place about this particular demand. The stakeholders agree that the current positioning for this demand is inaccurate and should be moved to the **Resource** quadrant in the top-left of the workbench.

    Drag and drop the bubble associated with Abel's idea up into the **Resource** quadrant.

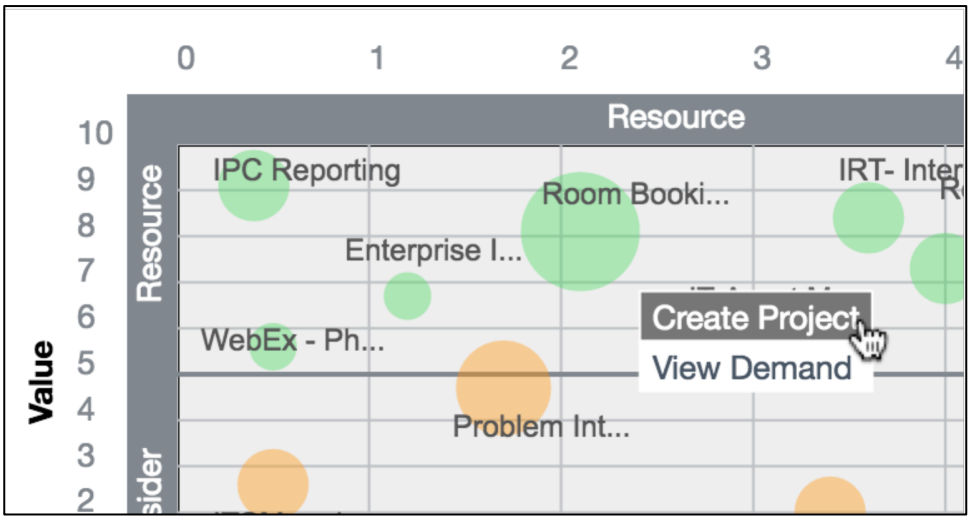
    Stakeholders also agree that the size of the Demand is bigger than currently visualized. Click on the demand to change the size.



16. Great news for Abel!!! The Stakeholders have agreed that this Demand should move forward into Project Management.

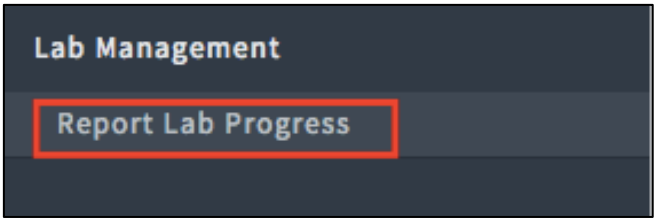
    Right-click the demand and select **Create Project**.

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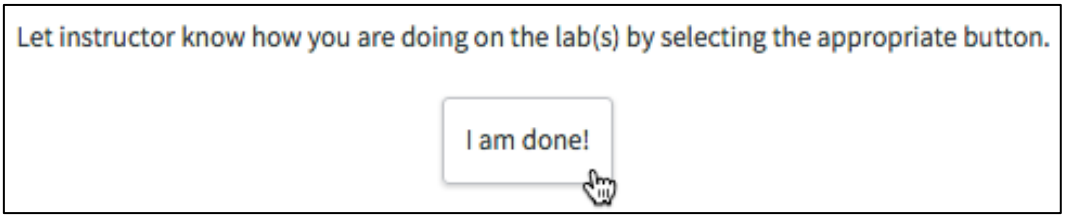


Progress Report

1. Navigate to **Lab Management > Report Lab Progress**.



2. Click I am done!



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Lab Goal

Lab 2.0 Manage the Project

This lab defines the project and creates an area within the project for the ScrumMaster. The team then creates Sprints and Stories to use the agile methodology to deliver the project.

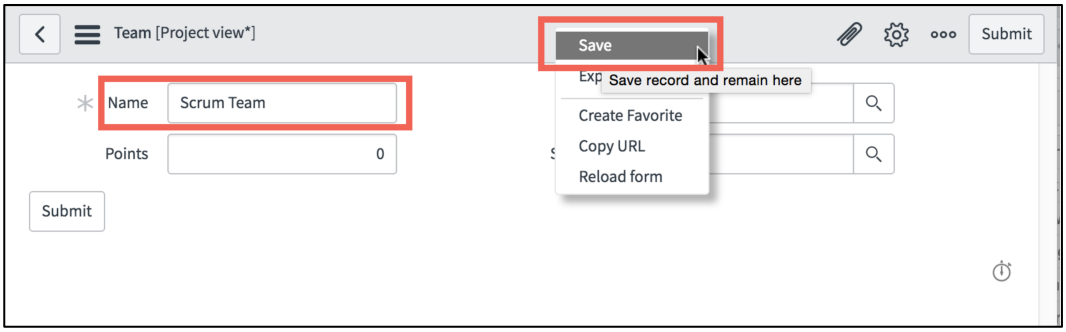
All organizations need to run a mixture of Waterfall and Agile methodologies. Even the most hard-core Agile enthusiasts would agree that Agile is not the best fit for building construction projects—or sending a man to the moon.

Some requirements are not emergent and waterfall projects are a reality for most organizations today.

Notwithstanding the limitations, the delivery method for Abel's idea will be Agile. In the previous lab Barbara created a project from the Demand Workbench and now that project will be prepared for the Agile team to begin work.

Barbara Creates the Development Team in the Project Management Application

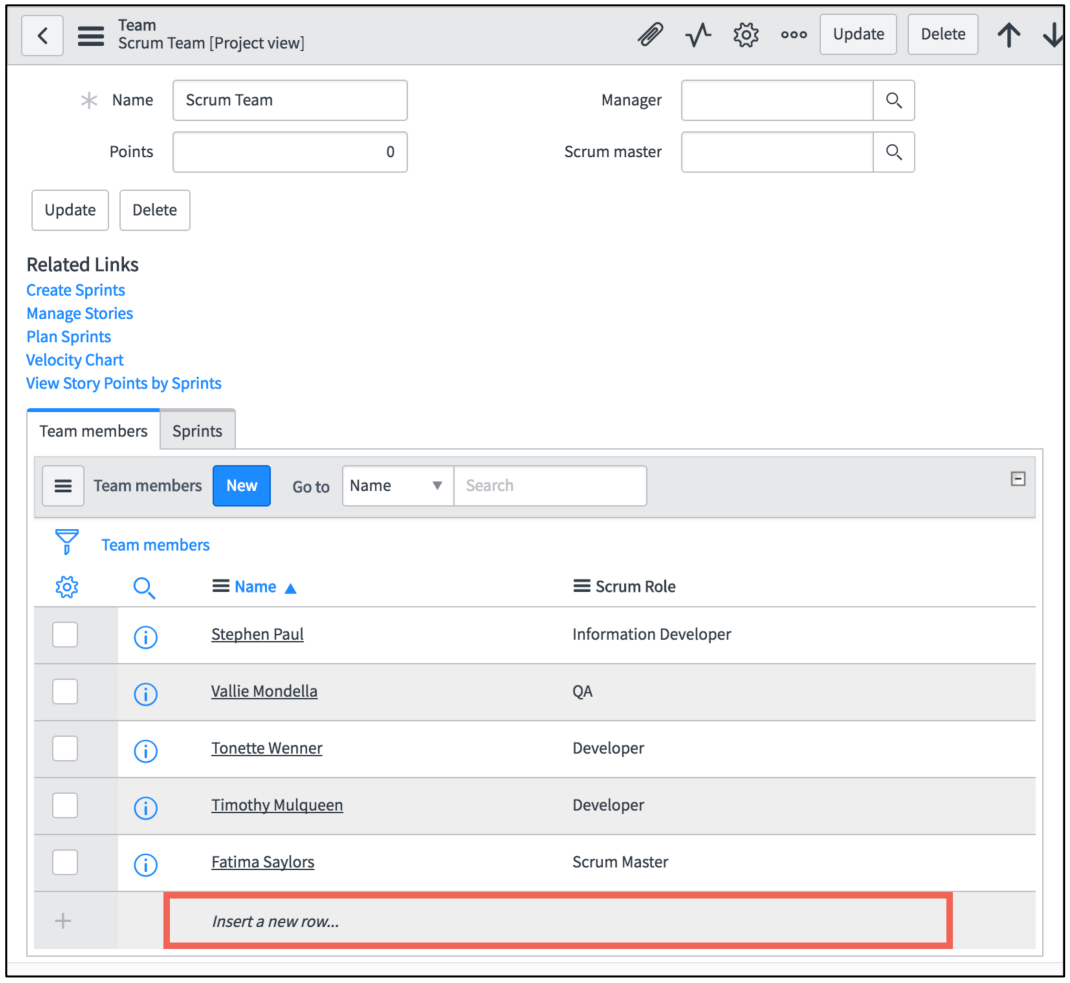
1. Impersonate user Barbara Hindley.
2. Navigate to **Project > Projects > Agile > Teams**.
3. Click **New** to create a new Agile team.



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4. Enter a **Name** for the Agile team, then **Save** the record, remaining on the form. Right-click the form header and select **Save**.

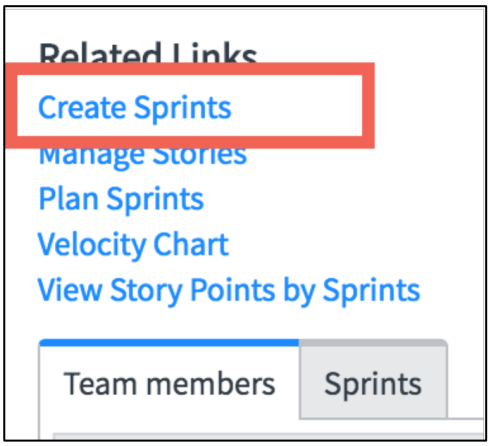
5. Add the following team members to the group, using the list editing capability in the related list:



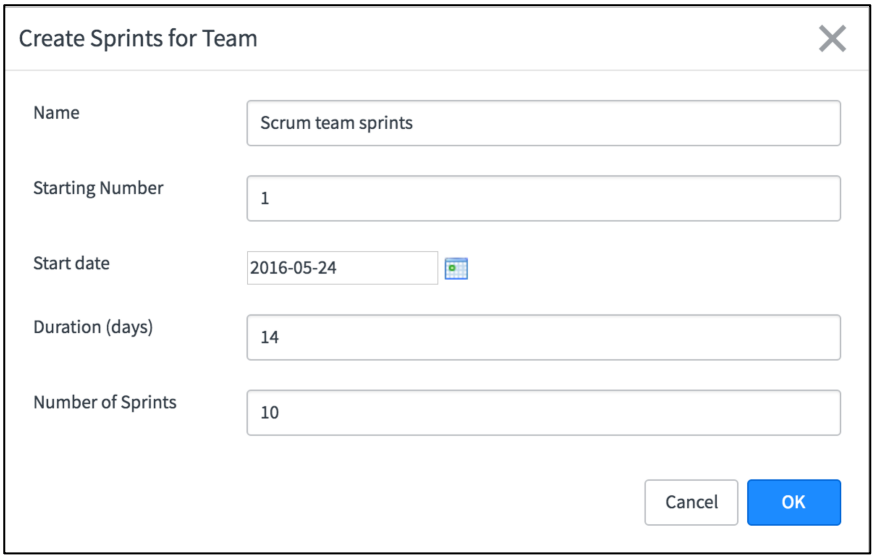
Stephen Paul – Information Developer
Vallie Mondella – QA
Tonette Wenner – Developer
Timothy Mulqueen – Developer
Fatima Saylors – ScrumMaster

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6. Create Sprints for development to work on by clicking the **Create Sprints** related link.

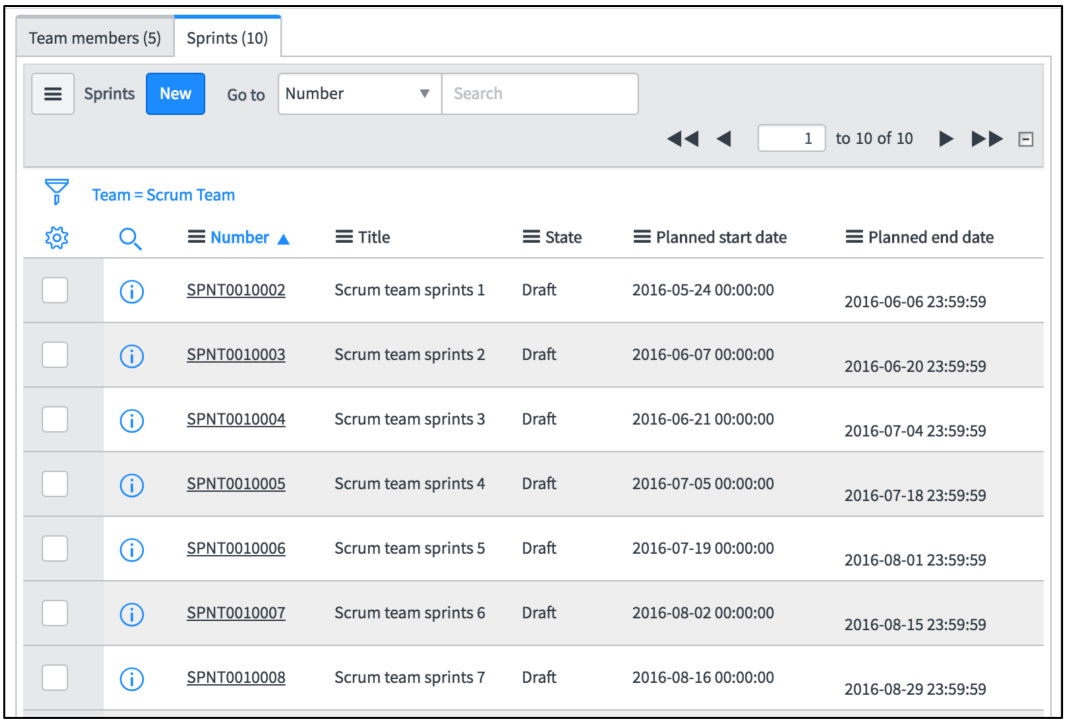


Create 10 sprints for the new team, starting on May 24th (next Tuesday). Each sprint is 14 days (including weekends).



7. Verify that the sprints have been created in the **Sprints** list.

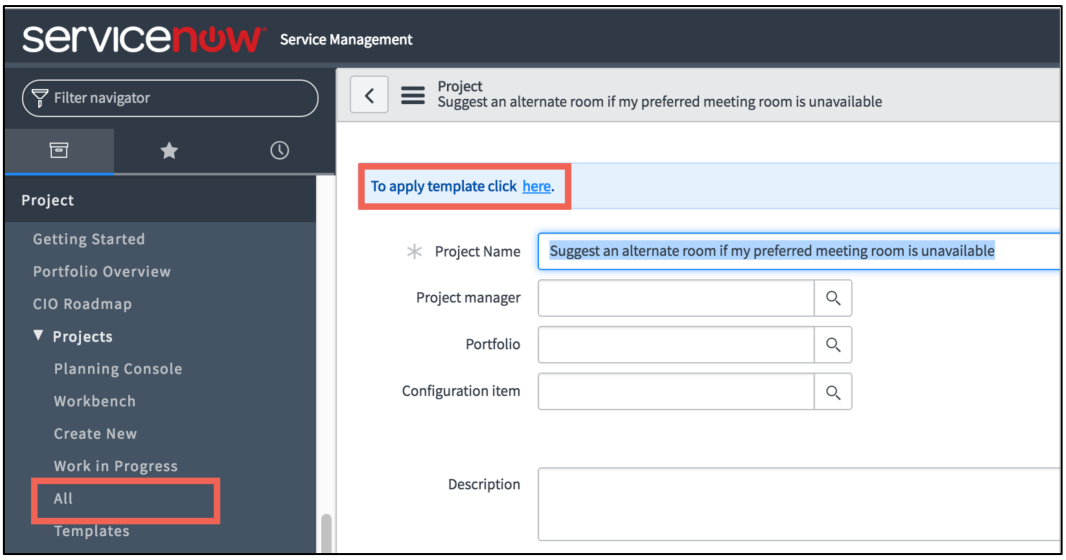
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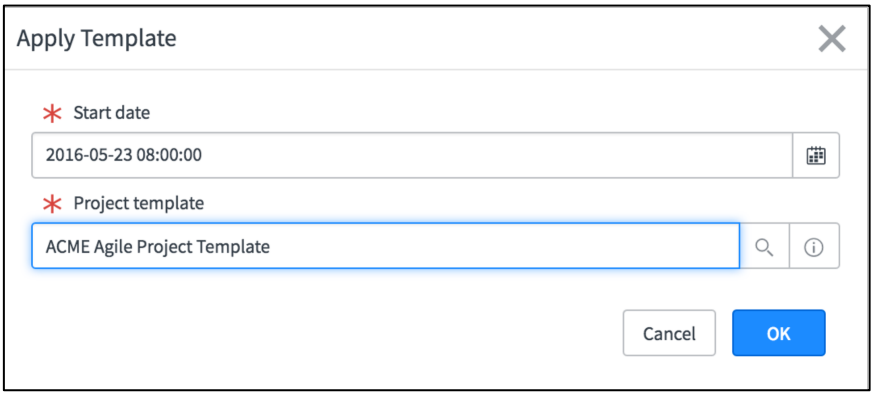
Barbara Prepares the Project for the Team to Begin Planning

1. Navigate to **Project > Projects > All**.
2. Locate the project created from the Demand Workbench, either by **Number** or by **Short Description**.
3. Barbara previously created a **Project Template** to ensure that the project team captures all relevant information.

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Apply that template to the project.



Start date: 23rd May (Next Monday when you get back from Knowledge16!).

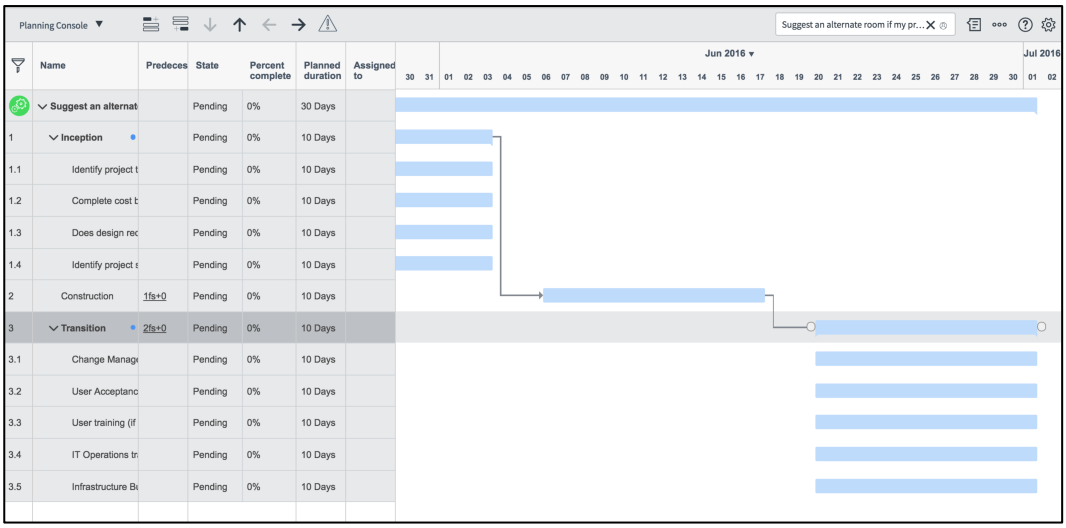
Project template: **ACME Agile Project Template**.

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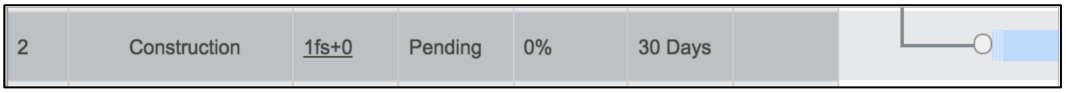
4. View the project from a Waterfall planning perspective in the Planning console.



View the tasks that must happen before the Agile team performs their work in the **Inception** phase and the tasks that happen after the Sprints are complete in the **Transition** phase.

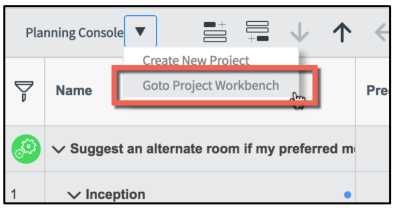


5. The agile team estimates that it will take at least three 2-week Sprints to build this feature. Lets extend the Construction phase to be 30 days long.

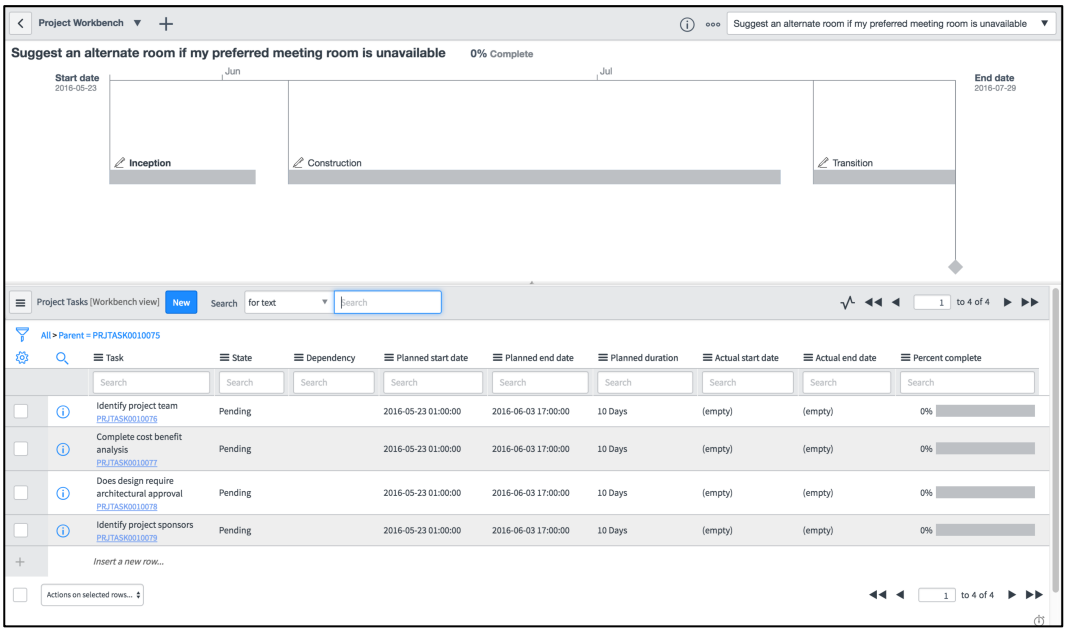


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6. From the menu at the top-left of the screen, select **Goto Project Workbench**.

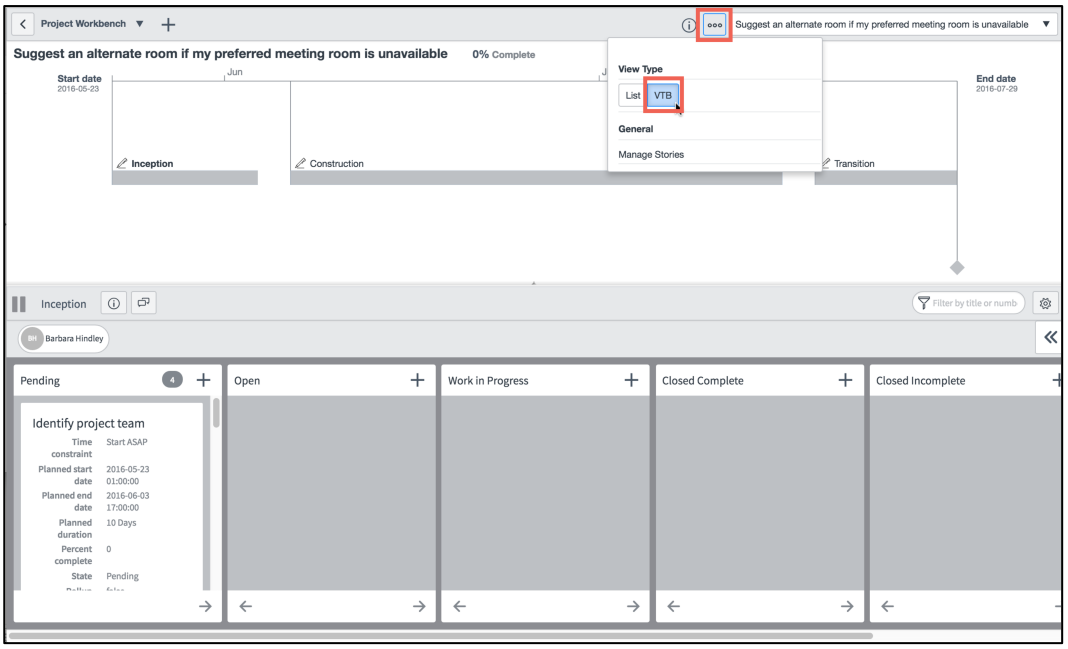


7. The project workbench shows a high-level view of the project, which is useful for “at a glance” reporting and discussing the status of projects.

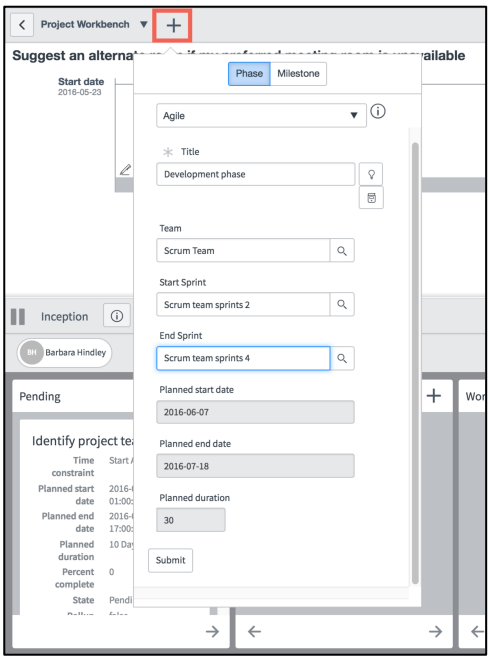


8. It is possible to configure the Project Workbench to show tasks in a Visual Task Board, rather than a list. This allows you to apply visual management to waterfall project stages such as the Inception and Transition stage.

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9. Barbara now creates a new stage to allow the Development team to start planning their work on the feature.

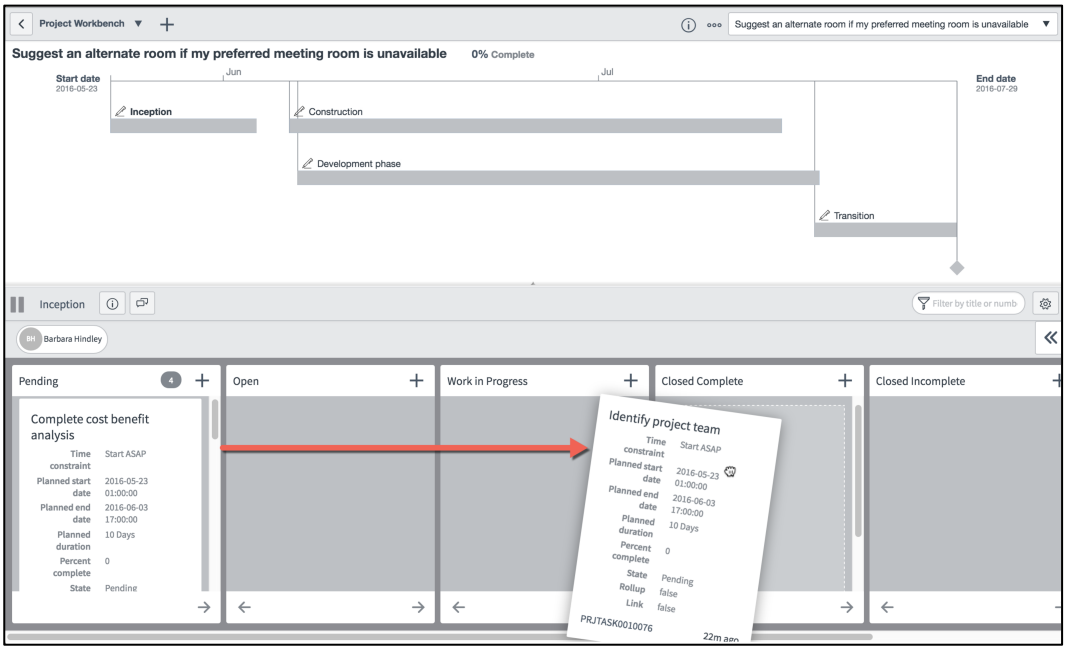


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10. You can see that the Agile development phase overlaps with the Construction project phase a little, but it is not a problem. You could extend the Construction phase by a few days, if you wish in the Planning console.

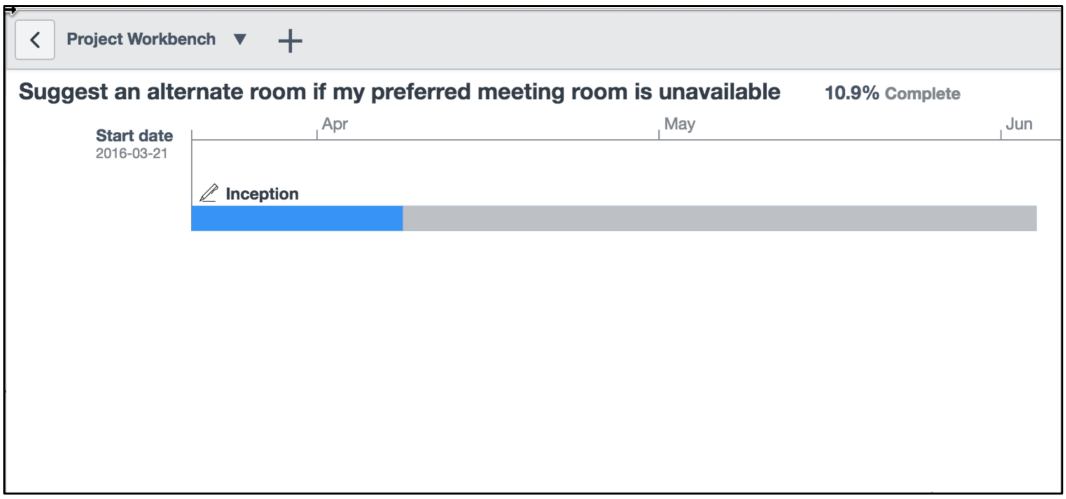
    Now the Agile team can start to plan their work to build this awesome new feature.

11. Before we finish, we can complete one of our project tasks. The **Inception** phase contains a task named **Identify Project team**. Drag that task into the **Closed Complete** column.



Notice that the progress bar in the Inception phase shows good progress. Keep it up!

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Progress Report

1. Navigate to **Lab Management > Report Lab Progress**.
2. Click **I am done!**

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Lab Goal

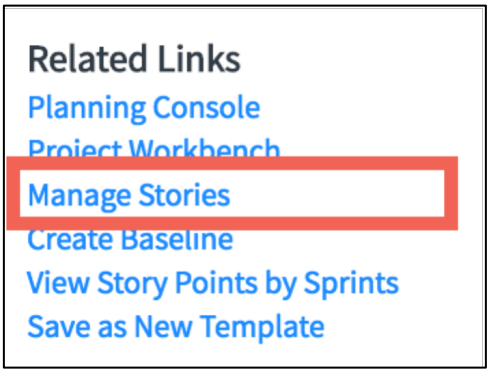
Lab 3.0
Manage
User Stories

This lab explains how to create a product backlog consisting of User Stories.

The User Stories are roughly sized using story points, and they are assigned to sprints. The team works the stories, creating valuable features as they progress through the sprints in the Construction phase of the project.

Fatima, the Scrum-Master, Creates a Product Backlog with the Team

1. Impersonate user **Fatima Saylors**.
2. Navigate to **Project > Projects > All**.
3. Open the project relating to Abel's idea.
4. From the related links click **Manage Stories**.

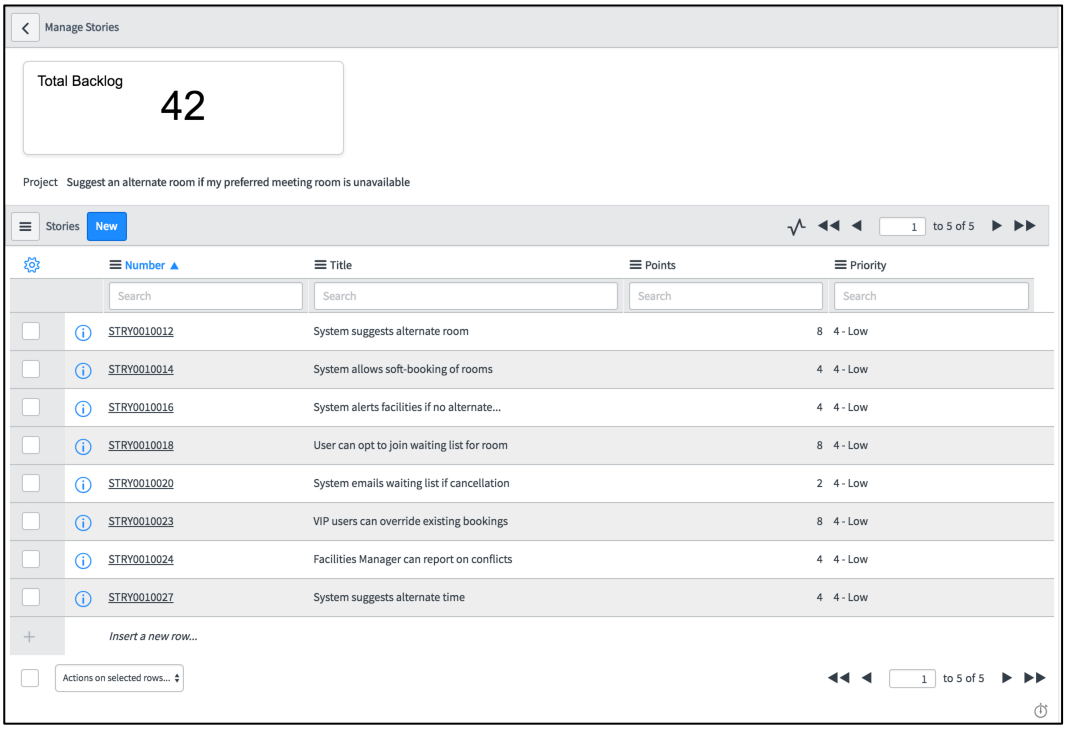


5. Create a **Product Backlog** consisting of 8 stories. The text used to describe the stories here is unimportant. Use the suggested text below or create stories named "Test 1" to "Test 8."

   System suggests alternate room (8 points)
   System allows soft-booking of rooms (4 points)

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System alerts facilities if no alternate found (4 points)
User can opt to join waiting list for room (8 points)
System emails waiting list if cancellation (2 points)
VIP users can override existing bookings (8 points)
Facilities Manager can report on conflicts (4 points)
System suggests alternate time (4 points)



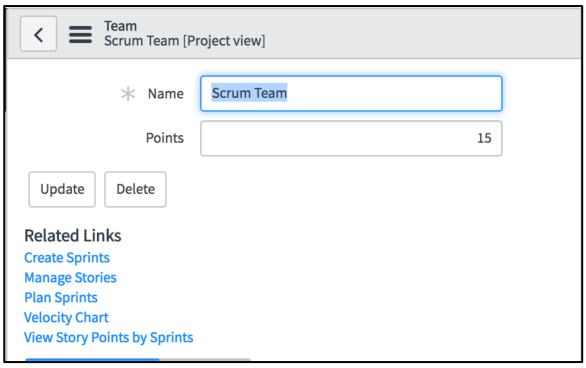
My backlog has 8 stories and 42 points. It is not important if your backlog has a different number of stories or a different points total.

6. As Scrum-Master, you believe that the team can complete around 15 points in a single Sprint.

   Navigate to **Project > Agile > Teams** and view the record for your Scrum team.

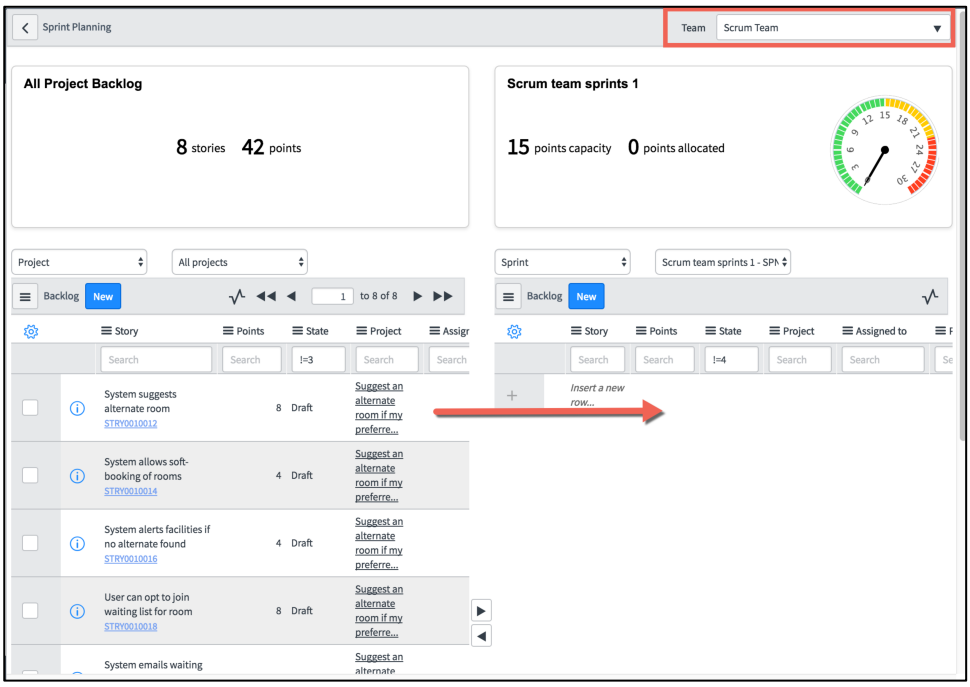
   Set the **Points** field to 15 and **Update** the record.

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7. Navigate to **Project > Agile > Sprint Planning**.

   If no team is selected, choose your Scrum team from the **Team** field at the top right of the user interface.



8. In my example Backlog, I have 8 Stories totaling 42 Points. Move Stories from the Project backlog to the Sprint backlog for each sprint, being careful not to exceed the capacity of the team.

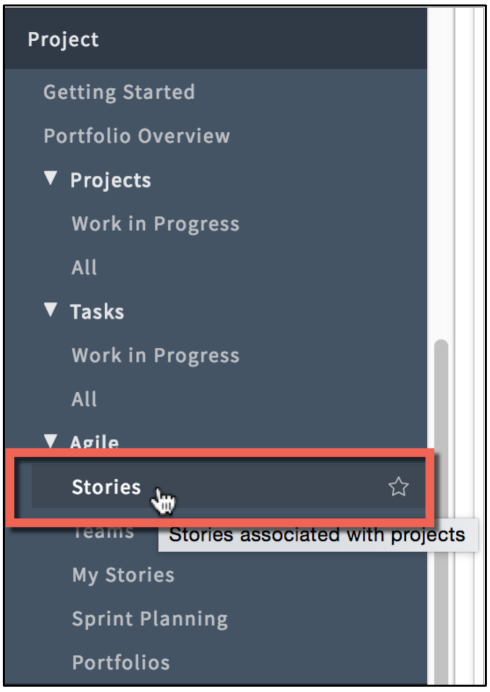
   Complete this exercise for Sprint 1, Sprint 2 and Sprint 3.

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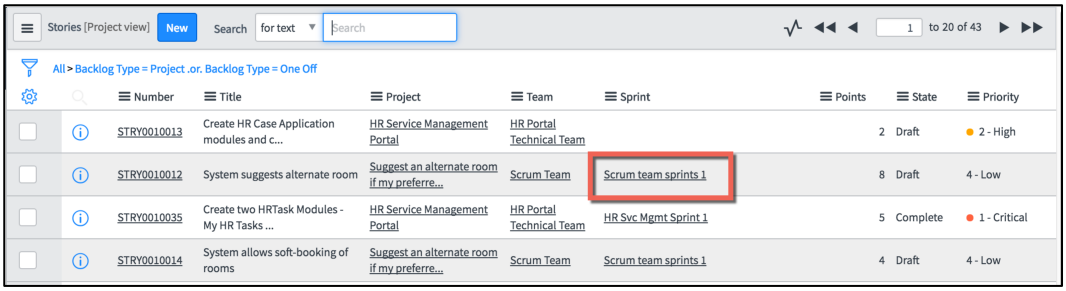
Fatima and the Team Begin the First Sprint

Now start building this awesome new feature. The team requires a visual, highly collaborative way of working, so configure that in ServiceNow.

1. Impersonate user **Fatima Sayers**.
2. Navigate to **Project > Agile > Stories**.

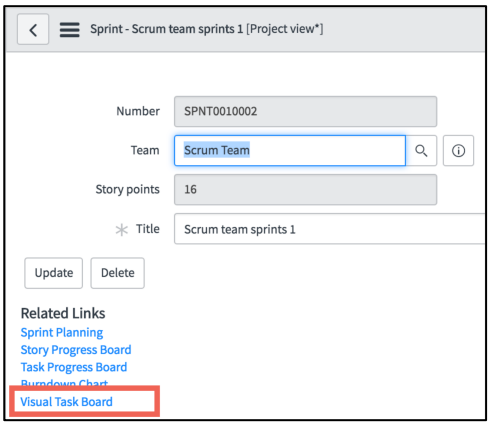


3. On the Stories list, click into the first Sprint for your team.

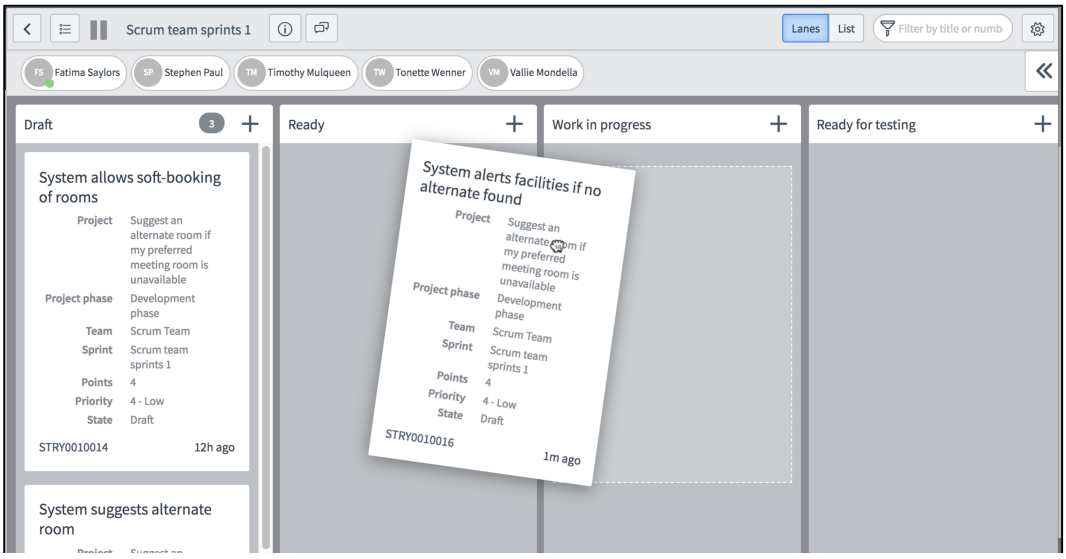


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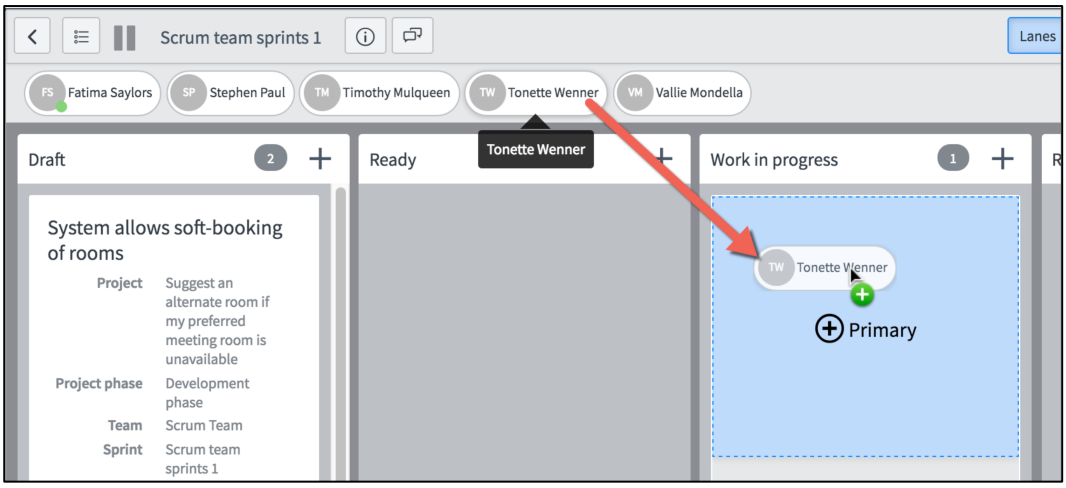
4. On the Related Links section on the Sprint form click **Visual Task Board.**



5. Move the first story into the **Work In Progress** column and drag a team member onto the card to track the ownership of the story.



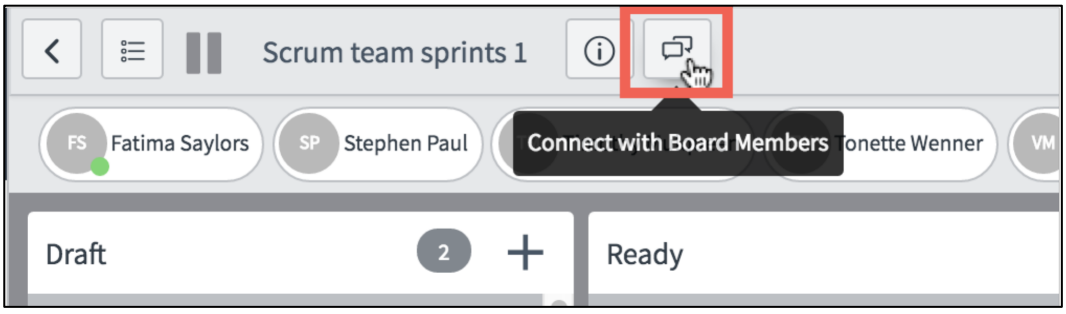
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6. Agile teams rely on high levels of communication and collaboration, and there is no substitute for having all of the team members in the same room.

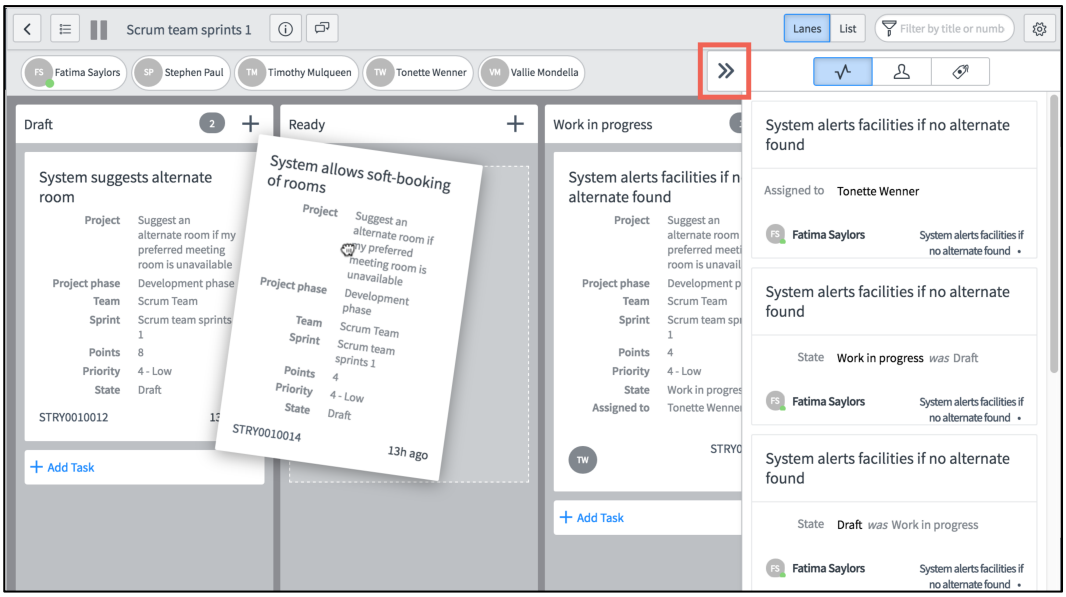
   For teams that are distributed or cannot be in the same location ServiceNow can offer a great solution for collaboration.

   Click the **Connect** button at the top of the Visual Task Board to start a chat session with the entire team.



7. Open **Activity View** to see a feed of all updates to stories in this sprint. As stories are moved between states and assigned, you can track the updates in the Activity View.

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8. Move all of the stories into the **Completed** lane to simulate the team completing all of the work.

9. Navigate to **Project > Projects > All** and open the project relating to Abel's idea.

   Open the Project Workbench. Note that the progress in the Development phase has increased because you have closed some stories.

Progress Report

1. Navigate to **Lab Management > Report Lab Progress**.

2. Click **I am done!**

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Lab Goal

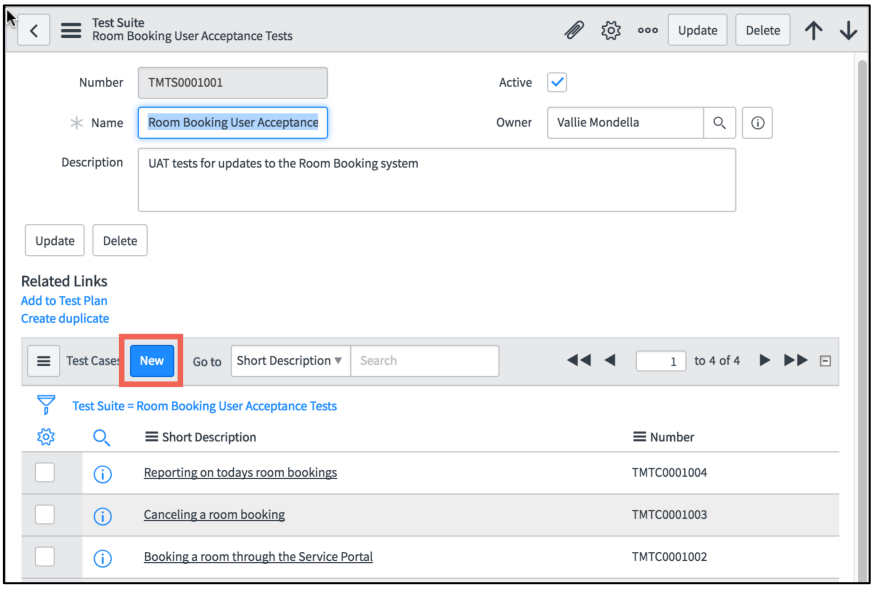
Lab 3.0
Writing Tests

This lab explains how to write tests to ensure that software meets technical and functional requirements.

Tests are executed both during the development sprint and also during the release process.

Fatima, the ScrumMaster, Writes Tests

1. Impersonate **Fatima Saylors**.
2. Navigate to **Test Management > Test Repository > Test Suites**.
3. Open the Test Suite named "**Room Booking User Acceptance Tests**."
4. Create a new Test Case record from the list at the bottom of the Test Suite form.



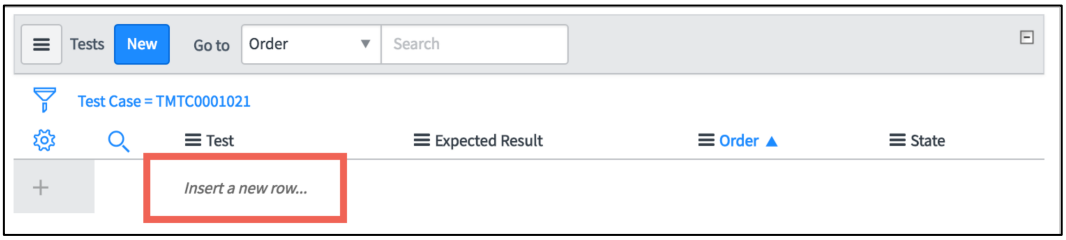
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5. Enter the following values into the **Test Case** form:

   Short Description: **Alternate room suggestions**
   Pre-requisites: **User must have registered user account on room booking system**

6. Right click the form header and select **Save**

7. Using list editing create 4 new records in the **Tests** list



Test	Expected Result	Order	State
Booking a room with no conflict	Room can be booked successfully	10	Ready
Enter a second booking for the same room, same time	Room booking system suggests an alternate	20	Ready
Add to waiting list for room	Success message on screen and confirmation email received	30	Ready
Delete first room booking	Email sent to waiting list informing of availability	40	Ready

Barbara Creates a Test Plan for Bart to Complete

1. Impersonate **Barbara Hindley**.

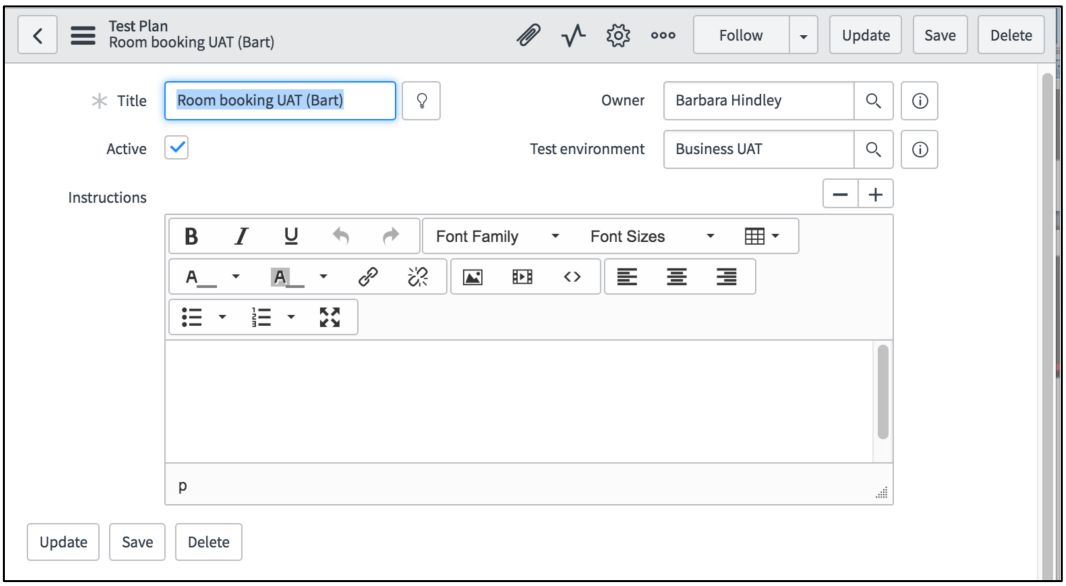
2. Navigate to **Test Management > Test Execution > Test Plans**.

3. Click **New**.

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4. Enter the following values into the **Test Plan** form:

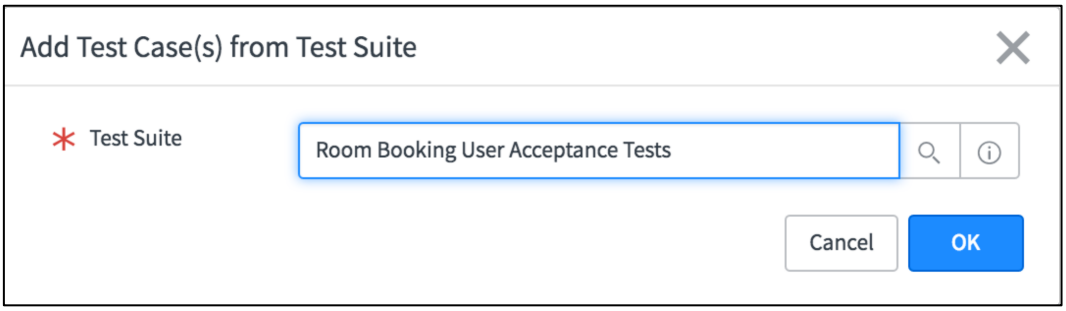
   Title: **Room Booking UAT (Bart)**
   Owner: **Barbara Hindley**
   Test Environment: **Business UAT**



5. Click the **Save** button.

6. Click the related link **Add Test Cases from Test Suite**.

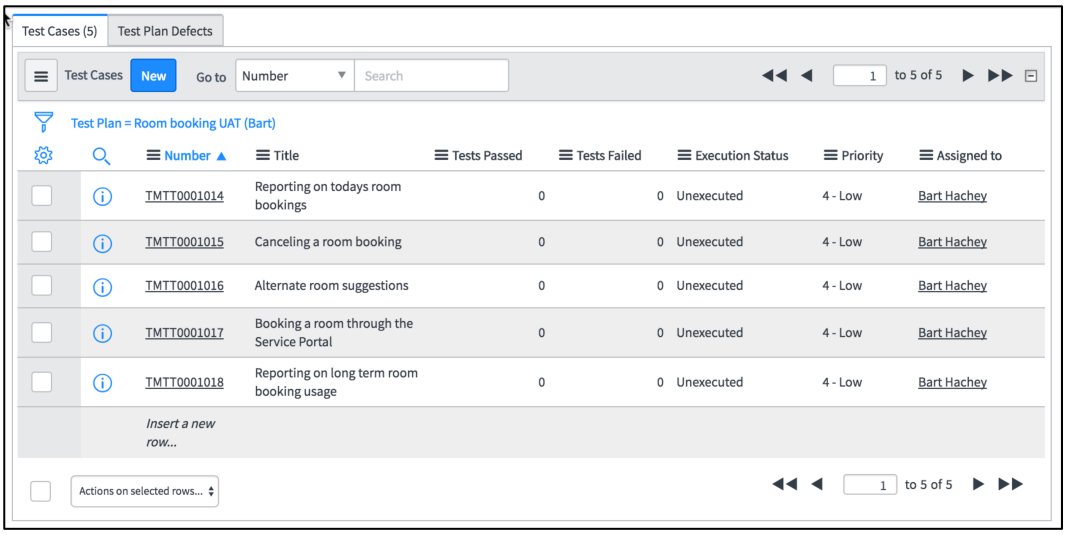
7. Choose the Test Suite **Room Booking User Acceptance Tests** and click **OK**.



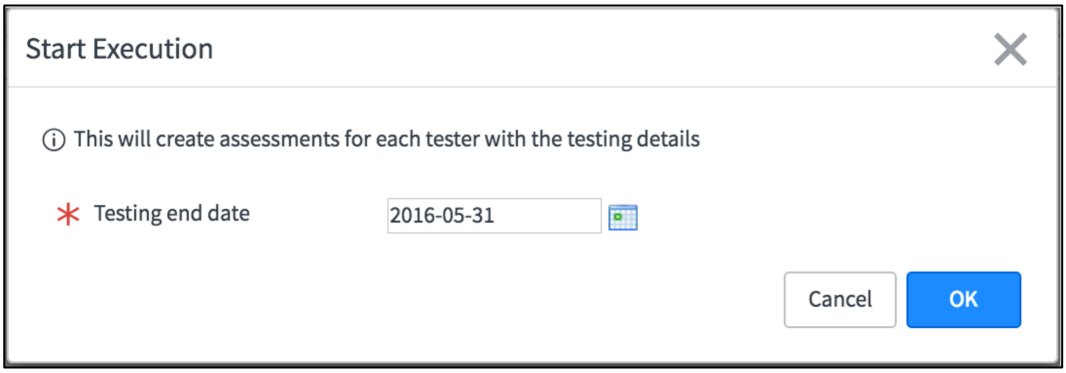
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8. Notice that records have been added to the **Test Case** list.

9. Assign all of the Test Case records to user Bart Hachey.



10. Click the **Notify Tester** related link. Set a Testing end date of 2016-05-31.



Bart Hachey Completes the Test Plan

1. Impersonate **Bart Hachey**.

2. Navigate to **Self-Service > My Assessments and Surveys**.

3. Click **Start Testing** on the Assessment associated with the **Room Booking UAT (Bart)** Test Plan.

4. Each Test can be completed with a value of **Failed, Passed, Blocked**.

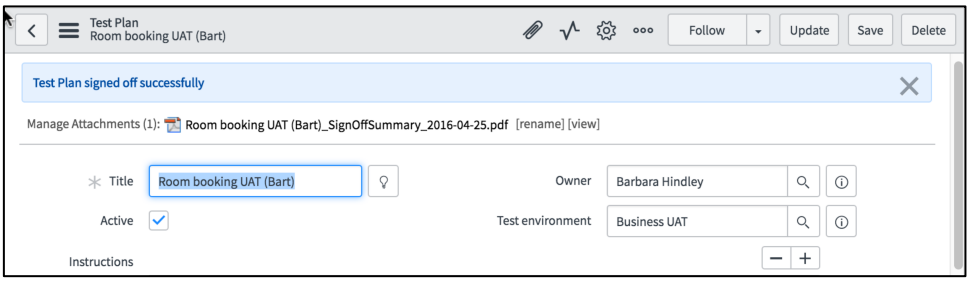
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5. Enter some test results. The values you choose for each test are not important for the successful completion of this Lab.
6. Once each test has been **Failed, Passed** or **Blocked**, click the **Submit** button.
7. You are presented with an informational message:



Barbara Reviews the Test Results and Signs Off the Test Plan

1. Impersonate **Barbara Hindley**.
2. Navigate to **Test Management > Test Execution > Test Plans**.
3. Open the Test Plan named **Room Booking UAT (Bart)**.
4. Review the Execution Status of the Test Results. You may see a mixture of Passed and Failed in Execution Status depending on how Bart completed the tests.
5. Click the **Sign-off Test Plan** related link.
6. On the Sign-off Test Execution page click **Submit.**
7. There is a PDF document attached to the Test Plan. Open the document and review it.



Progress Report

1. Navigate to **Lab Management > Report Lab Progress**.
2. Click **I am done!**

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