Using Libraries

I-DEAS™ Tutorials: Fundamental Skills

Learn how to:

- create a library
- check parts into a library
- check parts out of a library
- update from library

Before you begin...

Prerequisite tutorials:

    1. Getting Started (I-DEAS™ Multimedia Training)

       –or–

       Quick Tips to Using I-DEAS
       –and–
       Creating Parts

    2. Managing Parts in Model Files

Make sure you're in the following application and task:

     [icon] *Design*, *Manufacturing*, or *Simulation*
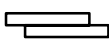
     [icon] *Master Modeler*

To fully understand libraries, the scenario we will use in this tutorial is for one user to create a part and check it into a library.

Then, a second user will check out the part and modify it.

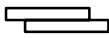First, to simulate the first user, open a new model file and give it the name User_A.

    [icon] *File*
         Open

    [box] *Name*: User_A

Set your units to mm.

    [icon] *Options*
         Units

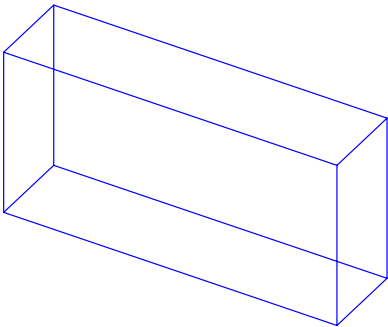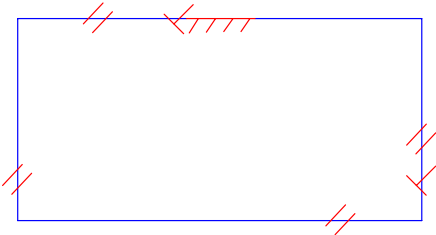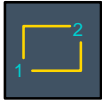   [icon] *mm* (*milli newton*)

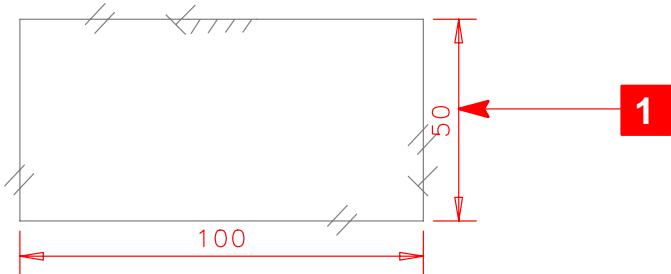Next, create the block shown below by following the steps on the next few pages.

Step 1. Sketch a rectangle to be used to create the block.

Step 2. Modify the dimensions of the rectangle to the values listed below.

1 pick one dimension

All

Dimensions form
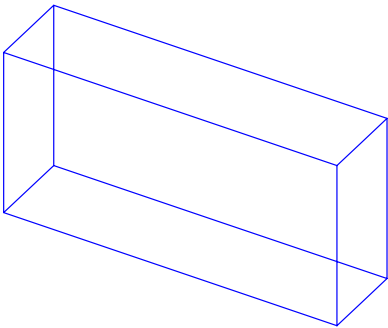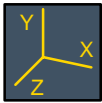
select smaller (vertical) dimension

50

select larger (horizontal) dimension

100

OK

Step 3. Extrude the block to a distance of 25mm.

Step 4. Name the part "Newblock."

XXX

Save your model file.

File
   Save

Warning!

If you are prompted by I-DEAS to save your model file, respond:

No

Save only when the tutorial instructions tell you to–not when I-DEAS prompts for a save.

If you make a mistake at any time between saves and can't recover, you can reopen your model file to the last save and start over from that point.

Hint

To reopen your model file to the previous save, press Control-z.

Libraries are used to store parts, drawings, and assemblies, and to allow data sharing among members of a team.

Think of libraries as a shelf in your work area. Libraries are the main storage locations for important models, including the final version and the history of earlier versions.

Libraries are also places where other members of your work team can access and share your parts.
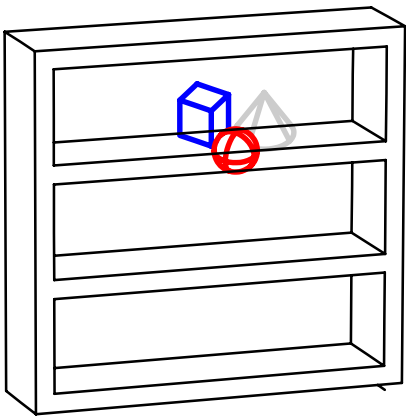
Use the *Manage Library* icon to create a library for your parts.
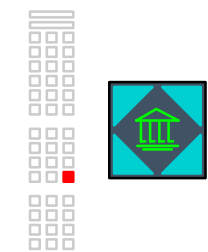
Libraries form

Create Library...

Create Library form

Library: My Parts

OK

Libraries form

OK

Recovery Point

File
    Save

When you check a part into a library, there are several ways to check the part in:

Check-in, keep to modify

Use this option when you want to make the part available for others or to keep a backup copy in the library. Your part in your model file is kept as if you checked it out to modify it. Other users cannot make changes to the part while you have it checked out. They will only be able to view (reference) the part.

Check-in, keep as copy

Don't use this option unless you want to break the associativity of your part with the one you check in. For example, use this option if you want to create a new part similar to the one checked in, but with a different name.

Check-in, keep for reference

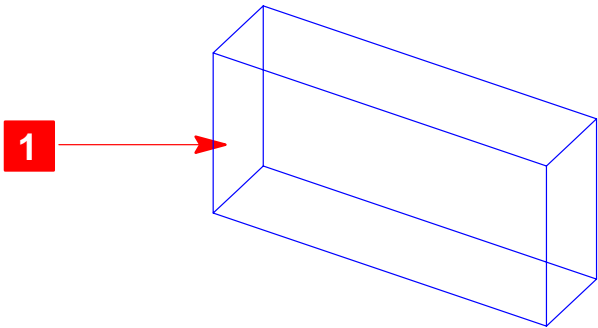Use this option to keep a reference version of the part for viewing but not to make changes.

Check-in, do not keep

Using this option will save space in your model file if you don't need the part on your workbench or in a bin.

Check the Newblock part into the library using the function *Check-in, keep for reference*.

1 pick anywhere on the part

Check-In form

◆ *Check-in, keep for reference*

🚫 If My Parts is the default library, you won't have to do the *Library Find* (skip to next page).

▭ *Library: Find...*

Library Selection form

My Parts

▭ *OK*

Check-In form

▭ *OK*

Check *I-DEAS List*.

You should see a message stating that the part was checked in successfully.

(Done)

Your model file will also be saved to ensure that its metadata is kept current with the information stored in the project metadata file.

This is covered in more detail in the tutorial "Finding Parts."

In this section we will demonstrate some of the following check-out options:

Check-out

Use *check-out* when you want to modify a part, and then check the part back in with the modifications. Only one user can check out a part to modify it at a time.

Reference

Use *Reference* when you want to see or work with a part but do not want to modify it. You'll get notified on the *Manage Bins* form (with *RFL**) if the original part changes.

Copy

Use *copy* when you need to modify the part for other purposes, but do not intend to check in your modifications for others to share. You may also use copy if you intend to modify this part and check it in under a new name.
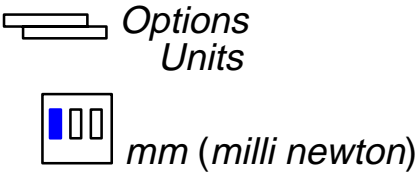
Remember
You are simulating a second user who will check-out and modify the part.

First, open a new model file and give it the name User_B.

    File
        Open

      Name: User_B

Set your units to mm.

    Options
        Units

    mm (*milli newton*)

Get the Newblock from the library.

Get from Project Library form

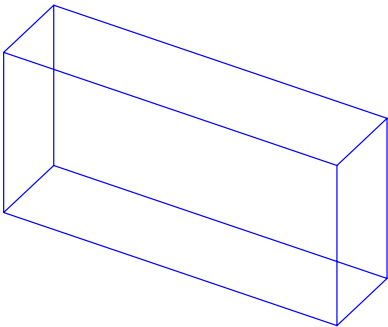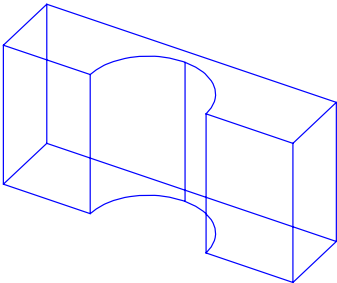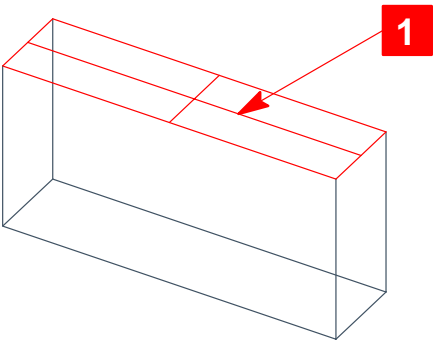 My Parts...(double-click)

 Newblock

 Reference

 OK

 The Newblock is not on your workbench. The part has been placed in your bin. Therefore, you will need to go into the bin and get your part.

As User_B, you will modify the Newblock, cutting out a slot as shown below.

First, try to sketch a circle on the top face of the block.

You do not have write privilege to this entity.

I-DEAS Warning form

Dismiss

Remember
You got the part from the library as a reference. You should use *Reference* when you want to see or work with a part **but do not want to modify it**.

Since you want to modify the part, you can change the library status with the *Manage Bins* icon.

Manage form

 Newblock

Modify Library Relationship form
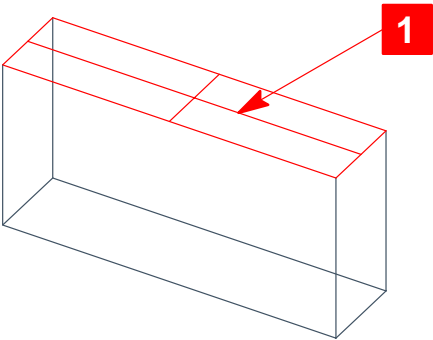
 Checked out (toggle on)

 OK

 Dismiss

Check *I-DEAS List*.

The User_B model file was automatically saved. By default, I-DEAS saves your model file every time you do any type of library operation.

Now sketch a circle on the edge of the top face of the block.

 Options...

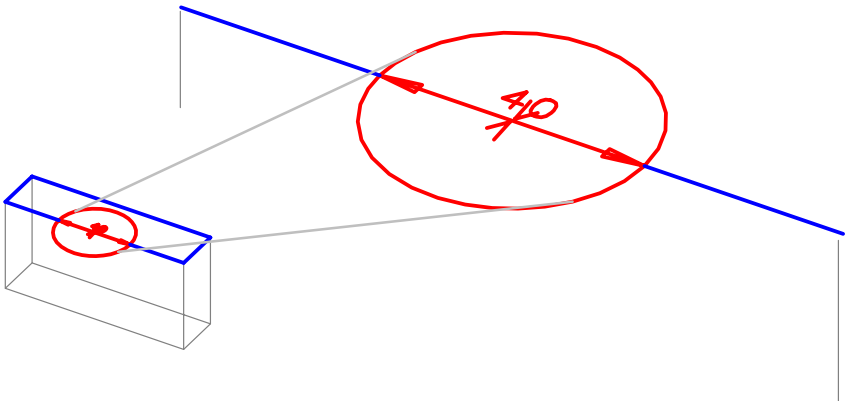## Circle by Center and Edge Options form

Radius: 20

OK

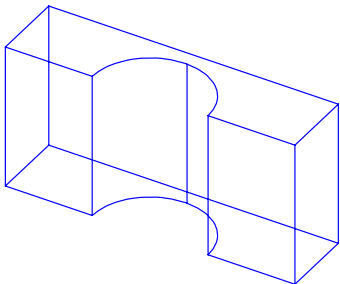Be sure to center the circle on the edge of the block.

Extrude the circle (*Cutout*, *Depth*: *Thru All*) through the block.

Now, check the part back into the library, but keep to modify.

 pick anywhere on part

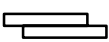### Check-In form

◆ *Check-in, keep to modify*

Things to notice
Notice the version number of the part is now 2. I-DEAS automatically assigned this part a new version number.

▭ *OK*

Next, reopen the User_A model file.

File
  Open
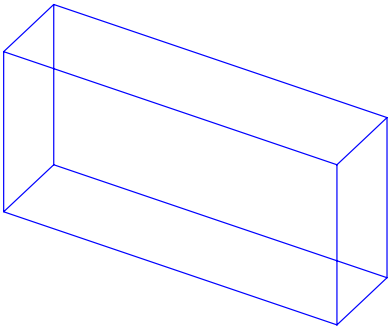
Things to notice
Notice that User_A still has version 1 of this part.

Check to see if you have the **latest** version of the part.

Any versions of parts that are out of date will have an asterisk in the *Status* column.

Manage form

      Status

Things to notice
Notice that Newblock is now referenced as *Rfl** .
The asterisk means that there is a newer copy of the referenced part.

      Dismiss

Use the *Update From Library* icon to update the part to the newest version created by User_B.

Select out-of-date entities to update form

 Newblock

 OK

Retrieval Information form

 OK
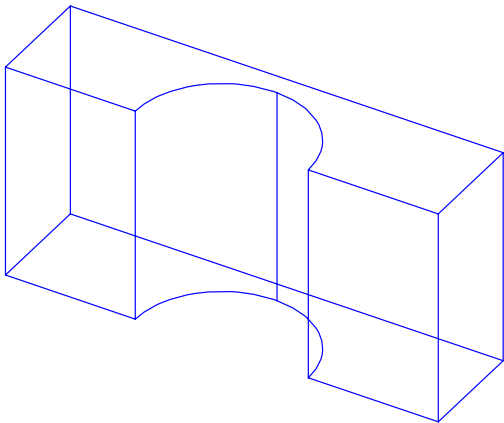
This form will only list parts that are out of date.

Since User_A has a reference of the part, it was possible to update to the latest version in the library. This illustrates how one user can make changes to a part and check a new version into a library for other team members to share.

What will happen if User_A tries to modify this part? Try to modify the diameter dimension of the slot.
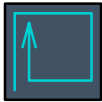
1 click twice on slot edge

 (Accept)
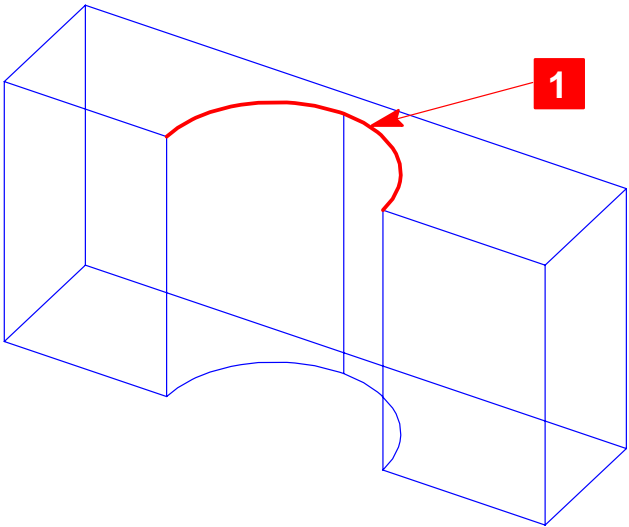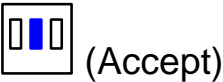
 You do not have write privilege to this entity.

I-DEAS Warning form

 Dismiss

 (Cancel)

Remember

User_B modified the part and checked it into the library with a keep to modify. This means that User_B owns version 2 and you are unable to modify it without changing its library status to check-out.

User_A will not be able to change the status of this part until User_B changes it to be a reference, or checks the part back in with do not keep.

You have completed the Using Libraries tutorial.

First, use the *Manage Items* icon to delete your second model file (User_B).

Items form

 User_B

 Modify (toggle on)

 Actions
        Delete

I-DEAS Warning form

 OK

Items form

 OK

You can find much more information on the *Manage Items* command in the tutorial "Finding Parts."
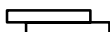
Delete or put away the parts. These parts are not used in any other workshops.

See also...

For additional information on many of the concepts covered in this tutorial, see the following in the I-DEAS Help facility:

⊏══⊐ *Help, Manuals, Table of Contents*

Data Management User's Guide
   Working with Libraries

⊏══⊐ *Help, On Context*

Choose any of the library icons

What's next?

After exiting, choose the Fundamental Skills tutorial that is next in the learning path you are following.

To exit this tutorial, select:

⊏══⊐ *File*
      Exit

Warning!

Do not use the menu in the *I-DEAS Icons* window to exit. Use the menu in the Acrobat Reader window.

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