Presenter background:

- Steve is an Applications Engineer in the Solid Edge Field Support group. He has over 25 years of experience in Mechanical Design Engineering and Mechanical CAD. He has held roles as an Application Engineer and Educator at Siemens PLM Software, PTC, Saratech Inc and Moderntech SI. Before moving into the CAD Industry, Steve applied his CAD knowledge in industries including hydraulic gear pumps, high speed packaging equipment, and textile equipment. He holds a two year drafting certification from the Williamston Career and Technology Center.

Areas of Expertise:

- Solid Edge Draft, UI and Competitive Analysis
Presentation Preface

Presentation Preface:

- Little known Solid Edge shortcuts
  - Use them to streamline your daily work

- Highlight underutilized new and old Solid Edge functionality and commands
  - Back to the basics of things that make SE great!
  - Reintroduce functionality that you may have forgotten

- Highlight some best practices for specific commands
  - Great SE commands that work best by tweaking some options
Do you struggle with orienting the steering wheel relative to the geometry you are trying to move or rotate?
Solid Edge Tips and Tricks

- Steering Wheel Components
  - Tool Plane
  - Torus
  - Secondary Bearing
  - Bearing Knob
  - Primary Axis
  - Primary Bearing
  - Secondary Axis
  - Origin
Solid Edge Tips and Tricks

- There are 3 basics for orienting the steering wheel to remember that will help you.
Solid Edge Tips and Tricks

- When you want to rotate the steering wheel 90° on an axis that **is NOT defined** by the primary axis of the steering wheel, hold down the Shift key and Click the small blue plane inside of the steering wheel.
- The Steering wheel will flip 90° about the axis NOT aligned with the primary access.
- You may also Ctrl + Click the bearing knob at the end of the primary axis and key-in an angle.
Solid Edge Tips and Tricks

- When you want to rotate the steering wheel 90° on an axis that is defined by the primary axis of the steering wheel, pick the bearing knob on the secondary axis of the steering wheel and drag to rotate.
- The steering wheel will snap to 90°.
- You may also Shift + Click the bearing knob at the end of the secondary axis and key-in an angle.
Once you get the steering wheel in the desired orientation, **Shift + Click the origin** of the steering wheel to relocate it.
- No need to continue to hold down the Shift key after clicking
- It will not flip orientation.
  - Secondary axis will not realign to an edge
How can you make an imported solid construction body into the base feature in a synchronous environment?

This would be the "Make Base Feature" command in the ordered environment.

A checkbox next to the feature indicates that it is construction geometry.
Solid Edge Tips and Tricks

- Right mouse button click on the construction feature and select "Attach"
- Select Add
Solid Edge Tips and Tricks

- If you use a 3D motion controller like a 3D Connexion device or an Astroid, you may wish to return the scroll behavior of the middle mouse wheel to the ST3 behavior.
- Stop zooming when scrolling even when the cursor is not over the value edit field
- Only scroll value changes when a dimension is in edit mode
Solid Edge Tips and Tricks

- Setting is in Solid Edge Options
  - General Tab

![Solid Edge Options window](image)
Did you know you can get important system information while in a Solid Edge Part or Assembly file?
Solid Edge Tips and Tricks

- CTRL + ALT + (double click) MIDDLE MOUSE WHEEL
- Can be especially important when debugging an issue with hardware or software
Solid Edge Tips and Tricks

- Do you know how to add other standard templates to the Create section of the Solid Edge start page?
Solid Edge Tips and Tricks

- Select Edit Create Options and add other templates
  - Clicking Browse will open the templates dialog and you can simply add from the "More" tab.
Solid Edge Tips and Tricks

- PMI dimensions can be resized on the fly.
- Toggle the increase or decrease font icons or use shortcuts:

CTRL+Shift+, for decrease
CTRL+Shift-. for decrease
Do you know how to place a subassembly using a configuration?

Show Me! 06
Solid Edge Tips and Tricks

- RMB click into the white space of the Part Library to invoke the shortcut menu.
- Select "Use Configurations"
- Don’t forget to toggle it off to disable this function.
Solid Edge Tips and Tricks

- When you drag in a subassembly, a dialog will be presented with the option to select a configuration.
- Also there is the option to activate all parts.
Solid Edge Tips and Tricks

Did you know that when your cursor is over the Command Ribbon that you can use the middle mouse scroll wheel to toggle through the tabs?
Do you know how to change the color of the flow lines in an exploded view?
Solid Edge Tips and Tricks

- The Flow Line color is defined by the "Driven" color parameter in Solid Edge Options > Colors tab
Solid Edge Tips and Tricks

- Have you ever been in an assembly and could not locate edges or keypoints?
  - EX. Like moving a part with the steering wheel in an assembly and not been able to locate keypoints
Solid Edge Tips and Tricks

- Change the view style to Default.
  - Perspective will cause issues with locate
  - ONLY use perspective when creating images or renderings.
  - Perspective is NOT meant to be used for creation/modeling.
  - You can use CTRL+Shift and scroll middle mouse wheel to adjust perspective.
• An underutilized feature for using the radial menu is a gesture.
  • Combination of a right mouse button "long click" and moving the mouse in a particular direction
  • Can locate any of the 8 commands on the inside ring
  • The select tool in particular is very handy for terminating a command to select a face or part.
• Also remember that radial menu can be customized – per environment!
Solid Edge Tips and Tricks

- The timing can be set in the Solid Edge options > Helpers
- Minimum drag distance for gesture: = how far you must make the mouse travel to invoke a gesture
- Show radial menu after: = How long you must hold down the right mouse button as you drag to invoke a gesture
- Tweak the numbers slowly to adjust to your style.
- It **DOES take practice** to coordinate moving the mouse and holding down and letting off of the right mouse button.
Solid Edge Tips and Tricks

- Where do I find lists of the default shortcut keys for each Solid Edge environment?
Solid Edge Tips and Tricks

- Open a Part
- Customize the Command Ribbon
  - Select the environment
  - Select the keyboard tab
  - Change "Choose commands from:" to "All Keyboard Assignments"
Solid Edge Tips and Tricks

- Note that you can print out the keyboard assignments for each environment.
Solid Edge Tips and Tricks

- Have you ever been in a Synchronous Part and could not remove rounds?
- This is a caveat of synchronous technology.
  - If a round has **consumed an adjacent face** on one of the two surfaces being shared by the round, then synchronous technology cannot create a new face that does not exist in the current state of the model.
- The part cannot repair itself attempting to delete (or detach) the round.

- What do I do now?

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Solid Edge Tips and Tricks

- In cases like this you must do some "creative modeling" to add and/or remove material to get the geometry back to the state you need to continue.
Solid Edge Tips and Tricks

- Don't be afraid to use the integrated design environment, mixing synchronous and ordered features in the same model.
- In many cases, it makes a lot of sense to do this.
Rounding edges is often best left as an ordered operation.  
Eliminates synchronous faces getting consumed by rounds.
Do you know how to make cross-hatching look the same zoomed in as it looks when zoomed to fit?

- Make the hatch not resize dynamically while zooming in
Solid Edge Tips and Tricks

- If you set Solid Edge Options > View tab > Display as printed, then it won't change as you zoom in and out.
Solid Edge Tips and Tricks

- Did you know that you can use your middle mouse wheel to rotate about a face, edge, vertex or axis?
- Did you know that you can use your middle mouse wheel to pan?
Solid Edge Tips and Tricks

- To start the rotate command, Middle Mouse Click then move to the Face, Edge or Vertex then hold Middle Mouse Button (MMB) down to rotate.
- Clear  MMB Rotating
  - MMB click in free space – while in the Rotation Focus command
  - Alt + MMB click
  - Fit the view
  - Closing the file
- Shift + hold down track wheel to pan
If I have a drawing with drawing views, balloons, dimensions and parts lists. How can I delete everything in the drawing except the drawing views?
Solid Edge Tips and Tricks

- Ctrl + A will select everything on the sheet.
- Delete
  - Select no so you don’t delete the views.
Thank You!

Questions?