



- What is Design Exploration?
- What is it good for?
- Demo
- Q&A



What do you do when you...

- **Try out ideas** for next version of the product?
- About to perform **significant changes** to a **complex design**?
- **Evaluate different concepts** for a product design?
- **Incorporate** new ideas into the “official” design?

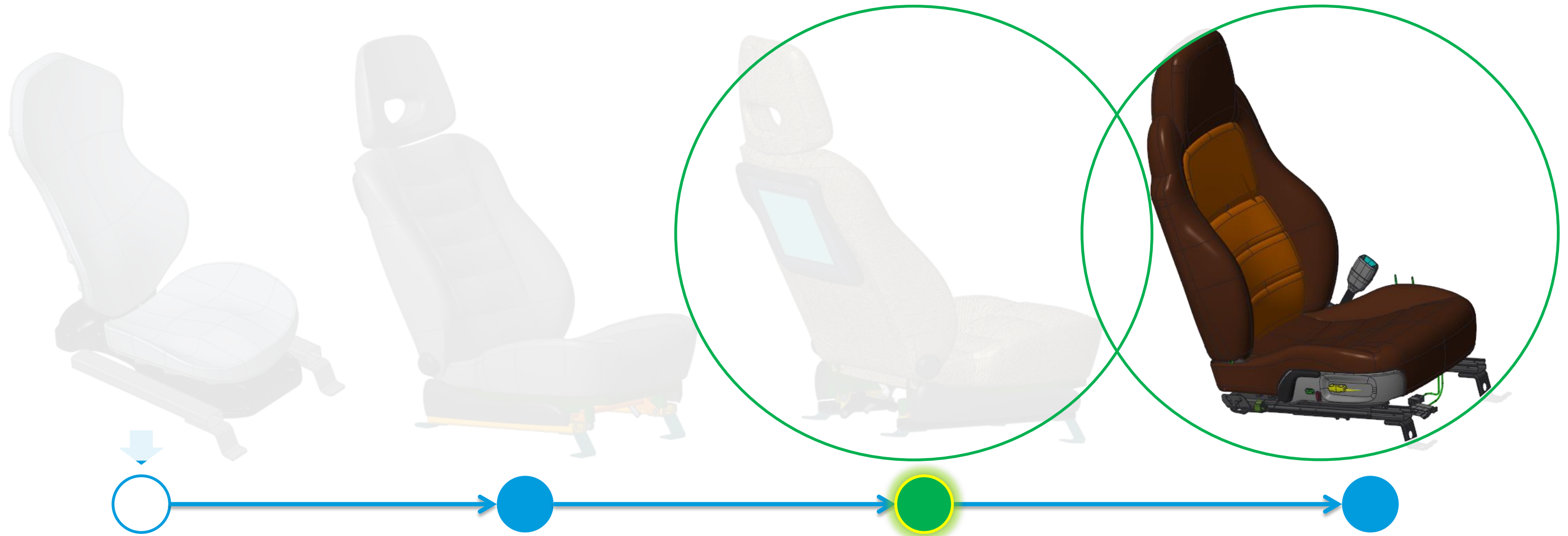


What do you do when you...



Typically these involve...

- **Back-up** and **duplicate** models to ad-hoc folders... Multiple times
- Repeatedly closing/clearing session to **reload different design versions**
- Take a lot of **screenshots** to use for Design Review...
- **Manually identify/incorporate** design changes to **carry forward** for “real”

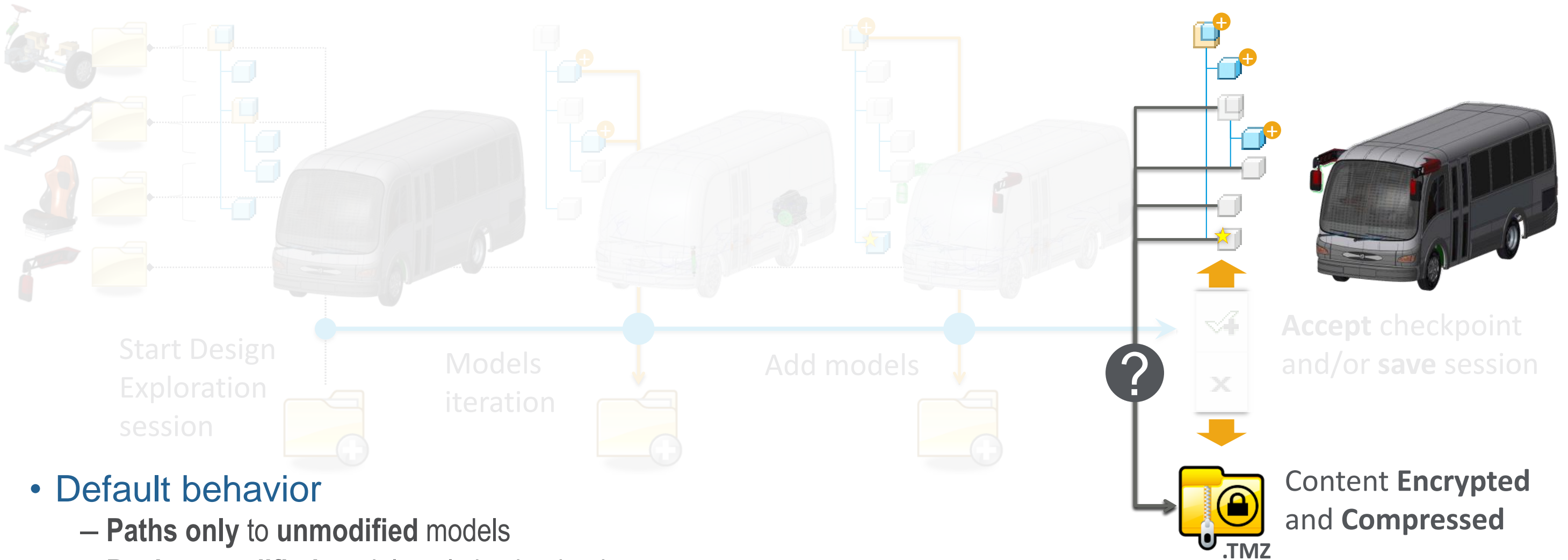


- Snapshot entire session content
- Capture incremental changes

- Instantly toggle checkpoints
- Accept changes or revert risk-free

- Split to different directions
- Develop simultaneously different ideas
- Evaluate all options before making decisions





- **Default behavior**

- Paths only to **unmodified** models
- Backup **modified** models only in checkpoints

- **Optional setting**

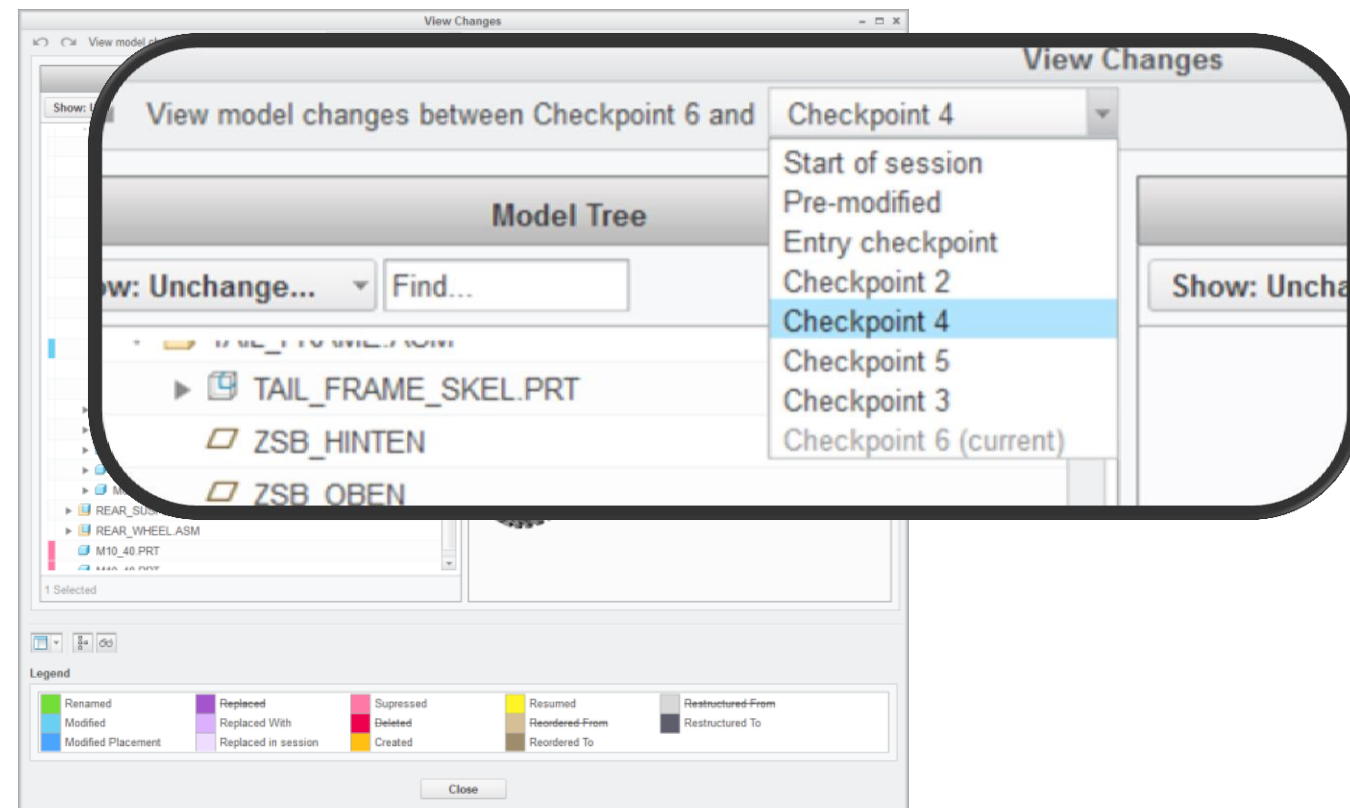
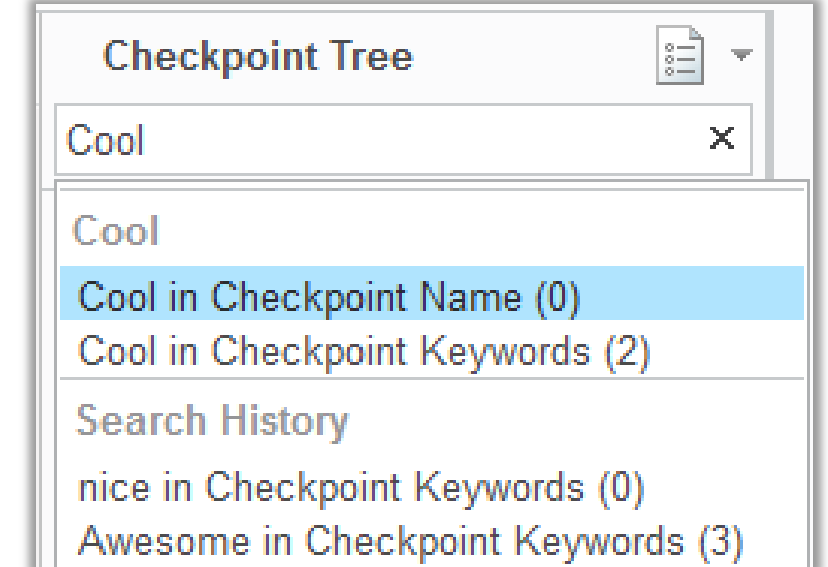
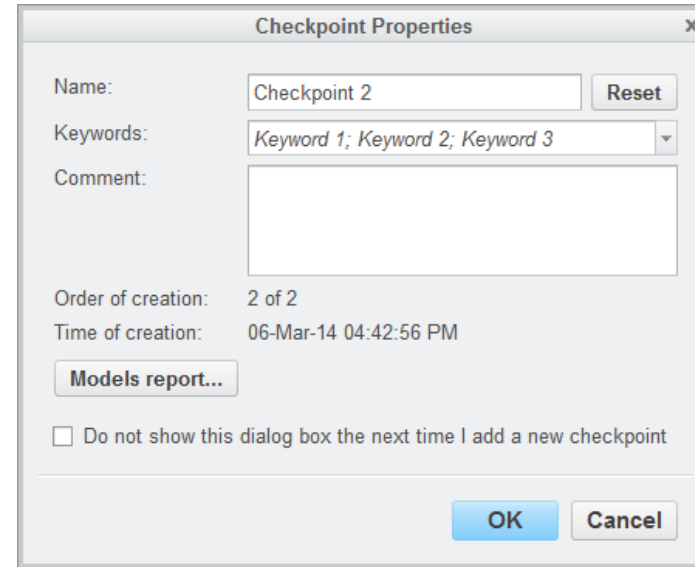
- **Full backups** all models in DEX session file
  - Upon Entry, Retrieval, or Manually

- **Sharing with other users?**

- **Same file system?** Keep default behavior w/o backup
- **Different files accessibility?** Use full backup

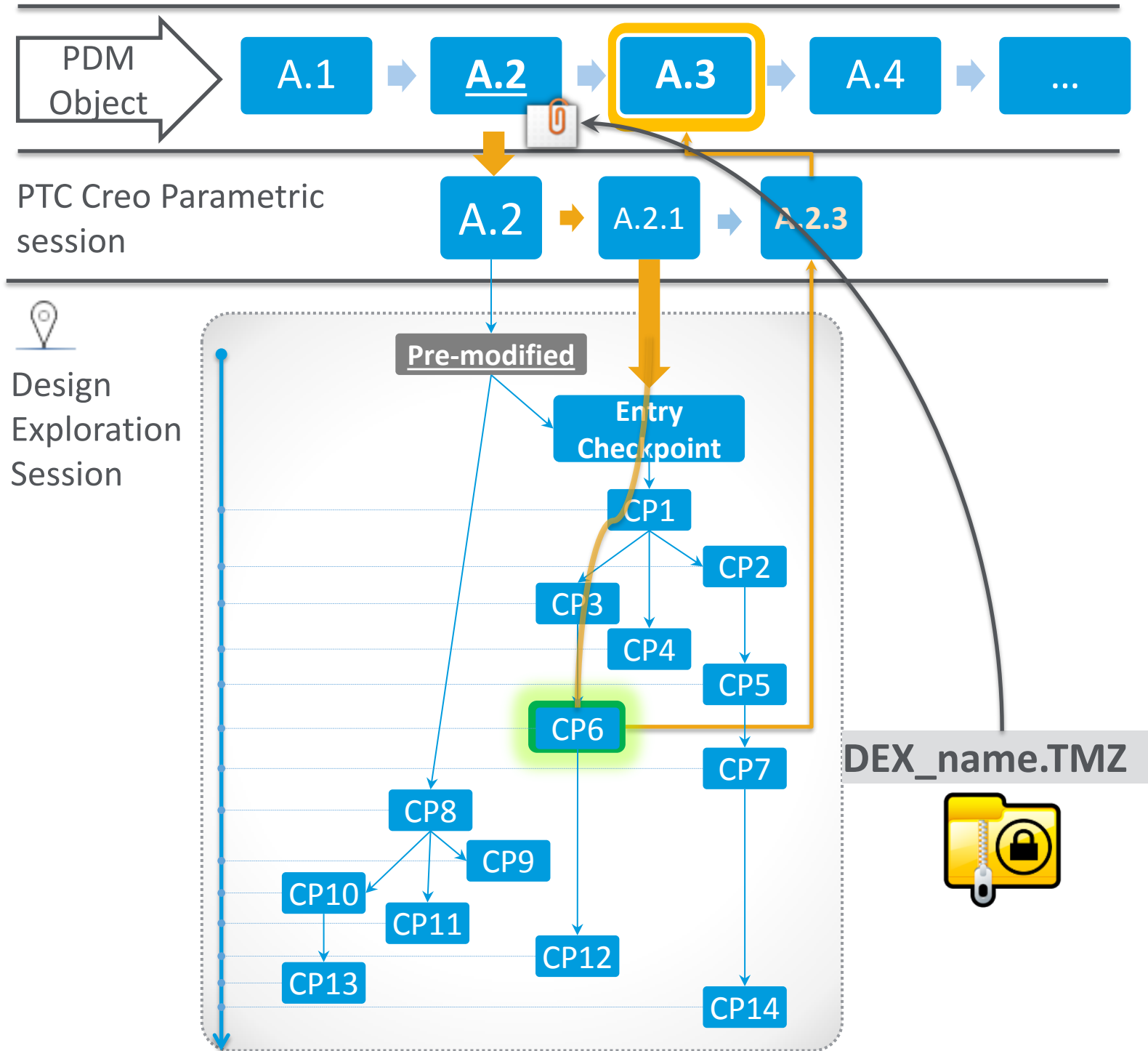


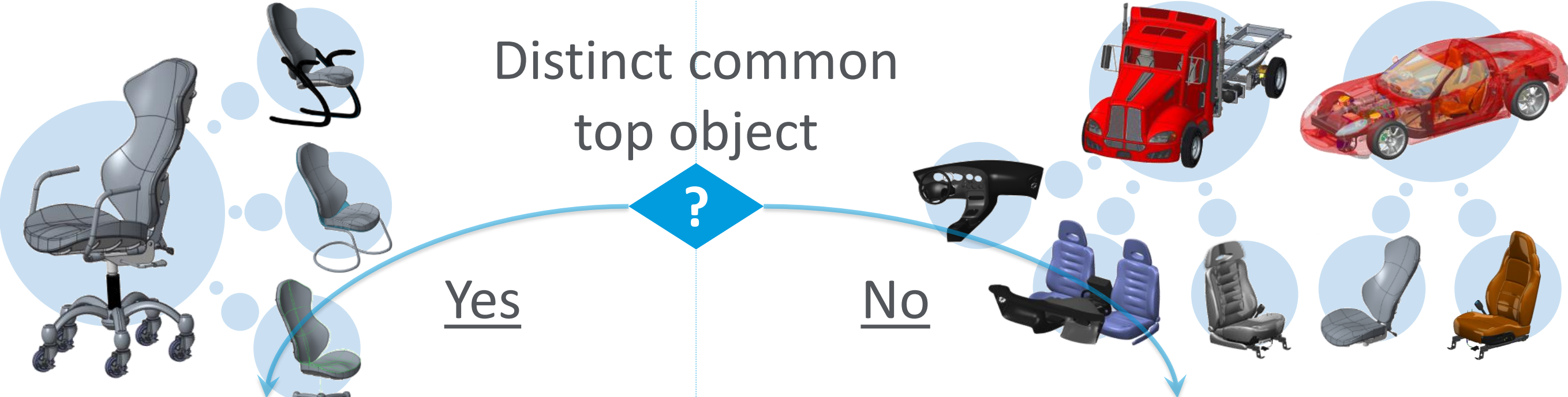
- Checkpoint properties
- Quick Search
  - Shows instant results
    - By checkpoint names
    - By keywords
  - Shows previously searched names
  - Filters tree to found checkpoints
- Review Changes
  - Compare to pre-modified or to other Checkpoints





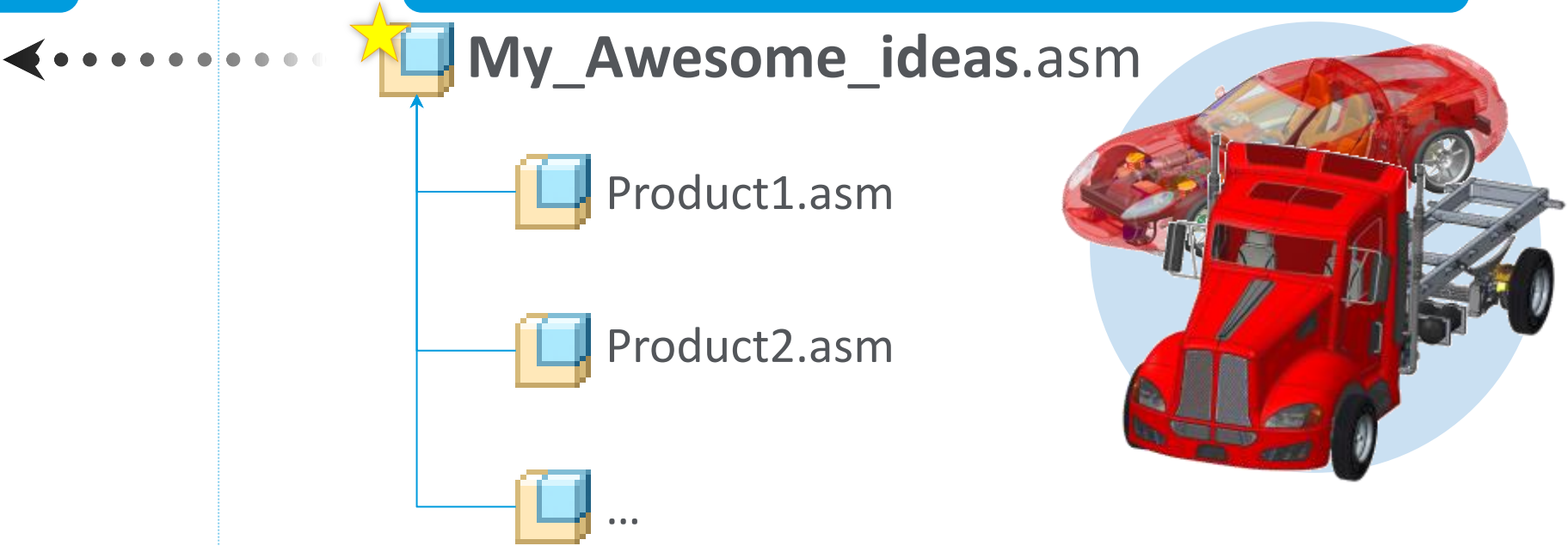
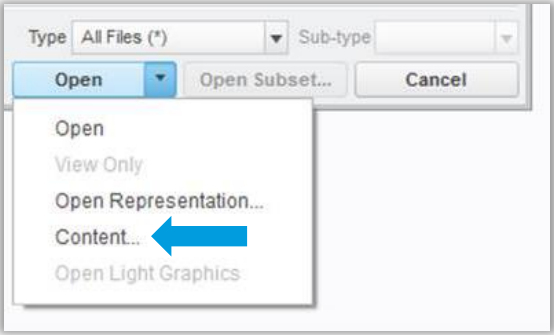
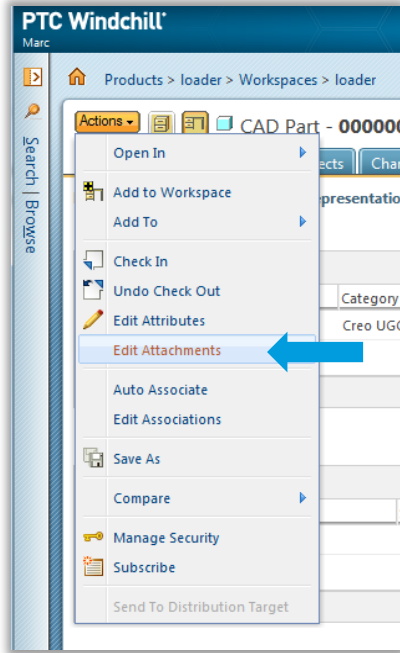
- Can initiate with already modified items
  - Start models captured: Pre-modified
  - Modified models: Entry checkpoint
- **One-way download** when in active Design Exploration session
  - Can only upload “legit” designs from regular session
- **Store TMZ file**
  - Design Review
  - Documentation
  - Revisit decisions
  - ...






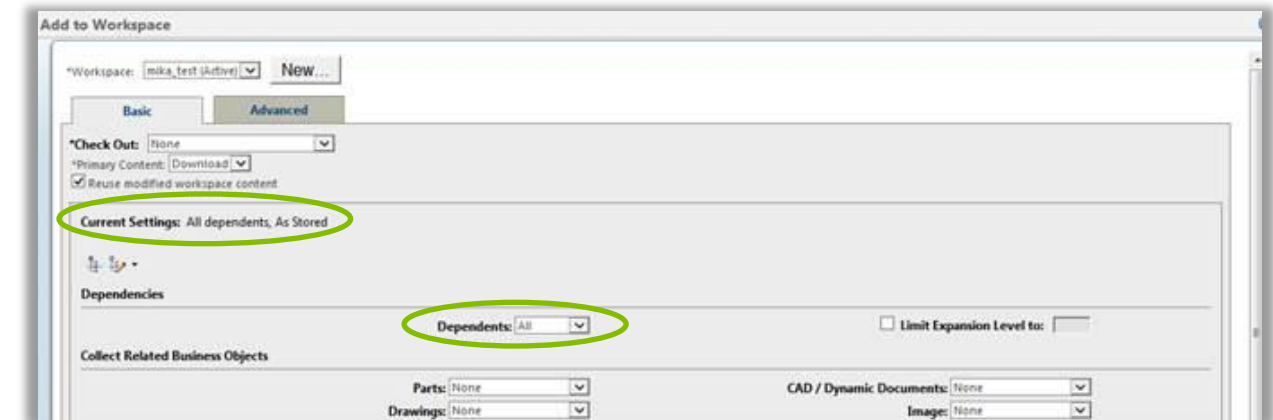
**Attach as Secondary Content**

**Create common context**



To be supported in **Creo 3.0 MOR + Windchill X-26 (10.3)** onwards

- Session content to be captured in a **TMU** file fully recognized as a CAD object in PTC Windchill
- Related models and required versions will be registered in TMU and linked as **Optional** objects
- Check-in TMU as regular Primary Object 
  - Will be recognized by Windchill as **Design Exploration Session**
- To restore a DEX session
  - Download TMU
  - Set dependencies to 'All'
  - Set requested versions to 'As Stored' (instead of default 'Latest')



## Confidently handle consequences of design change

- Intermediate update state

  - Data Sharing Features

- Live notifications of outdated items

Extern Copy Geom id 10

- Preview changes

  - Before/After
  - Isolate

- Selective Update

- Or explore update consequences

  - Can **accept changes**
  - Or **revert to entry-point**

- Automatic Update
- Manual Update with Notification
- Manual Update
- No Dependency
- Show Differences
- Design Exploration
- Remove Notification
- Update

Legacy "Dependent"

Legacy "Independent" \*Restorable

Break Dependency \*Permanently

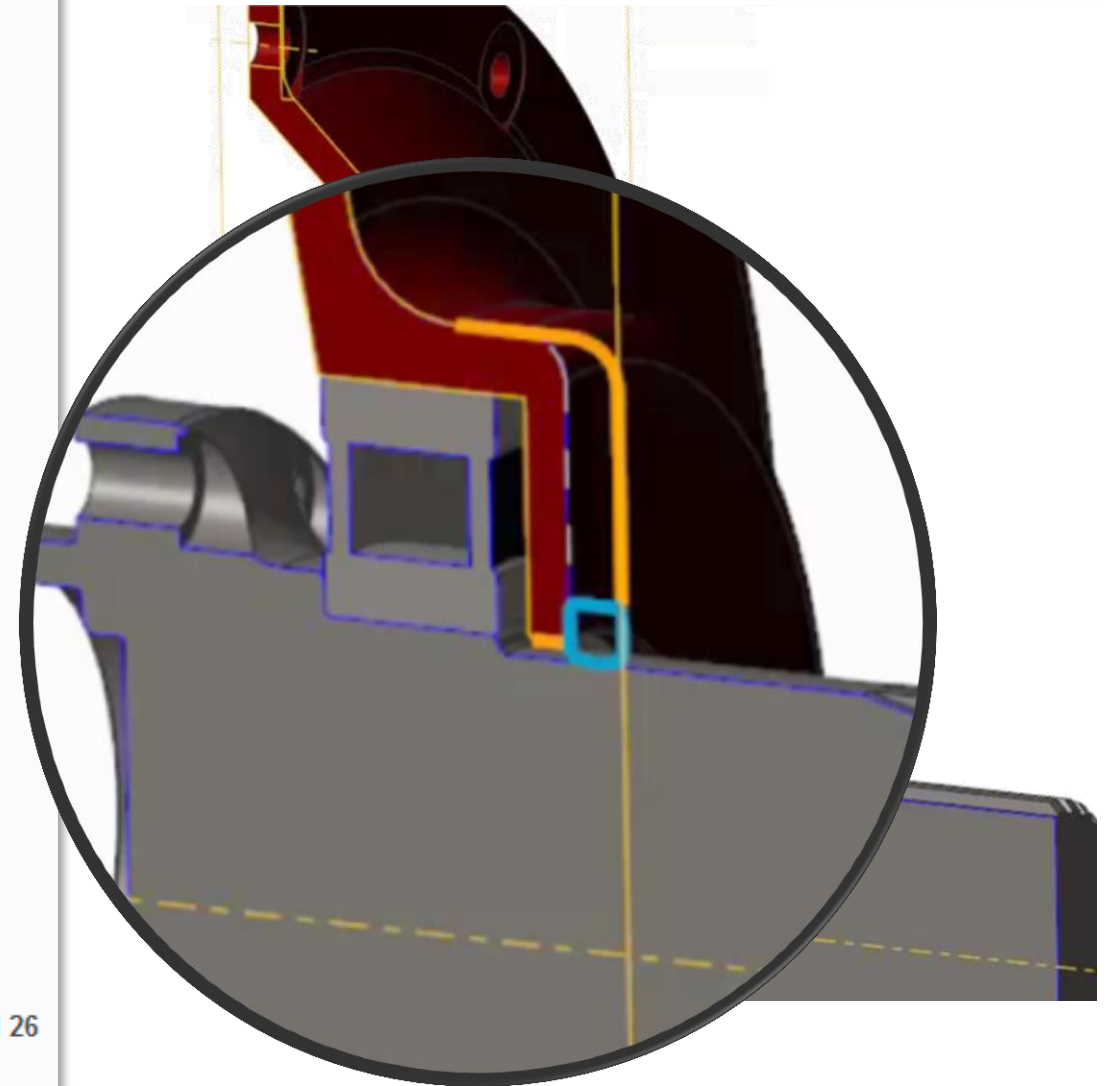
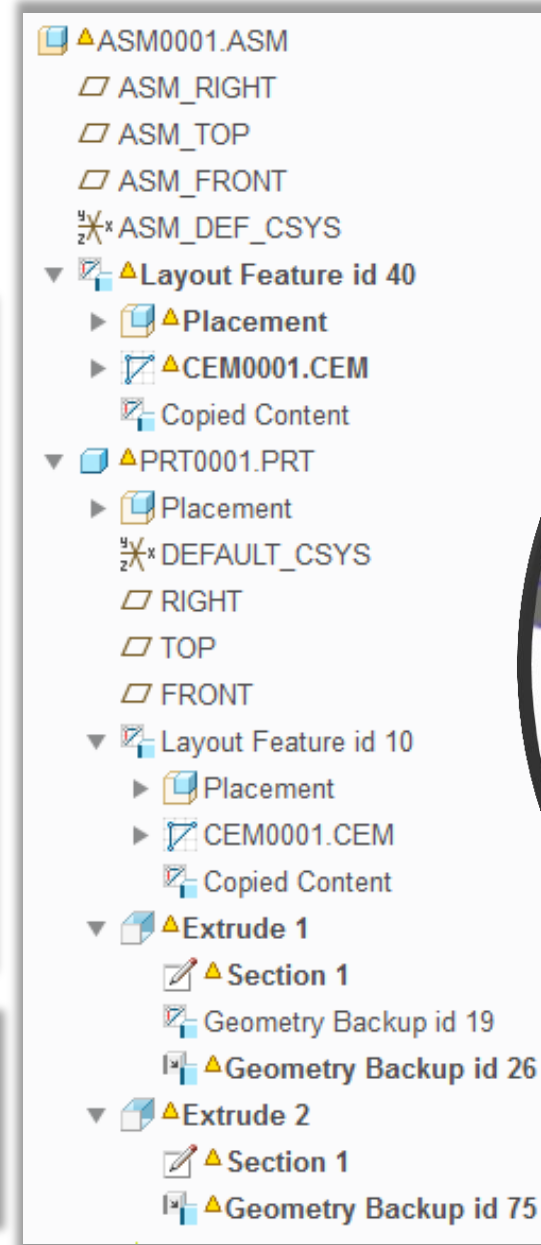
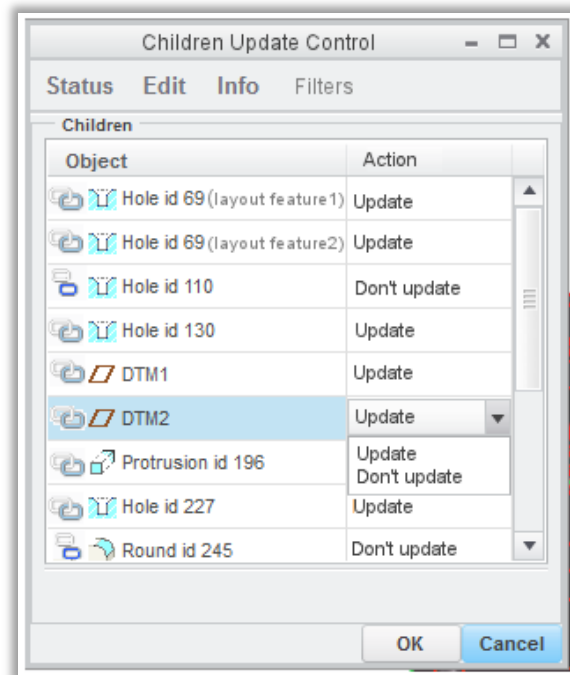
Tools | Geometry Display | Close

Isolate | Outdated | Changed | Explore Update | Remove Notification | Restore Notification | Update | Close

DESIGN EXPLORATION SESSION

- Pre-modified
- Entry checkpoint
- 2. Automatic checkpoint 2
- ➔ Add checkpoint

- Entity level changes tracking
- Selective children update
  - Propagate to all children in one shot
  - or update only some



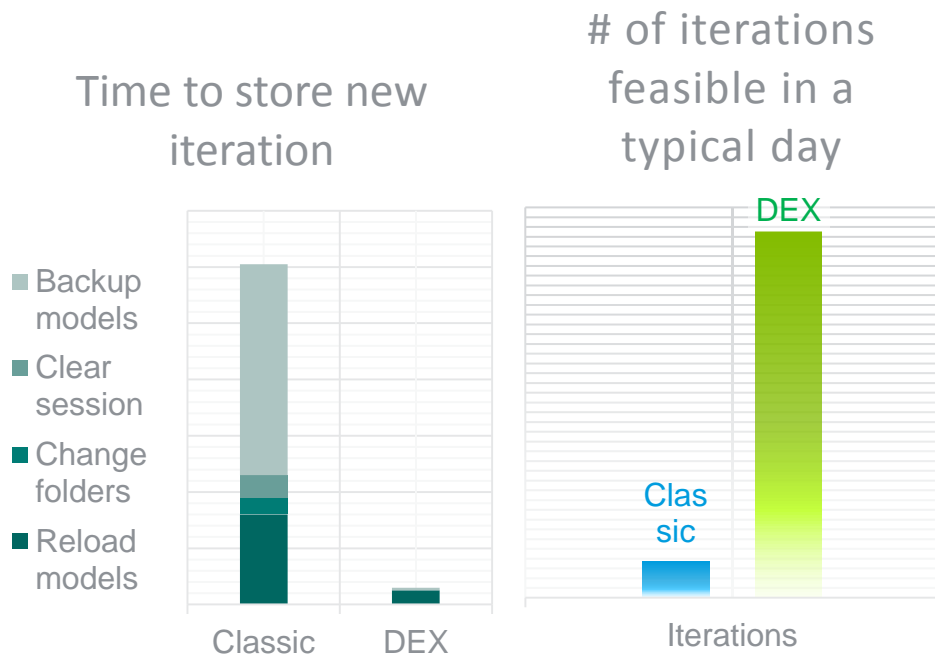
## Update Control and Data Sharing Features

Retrieve Data Sharing Feature reference model: No

Allow individual update control for children when updating a layout feature.

# DEMO

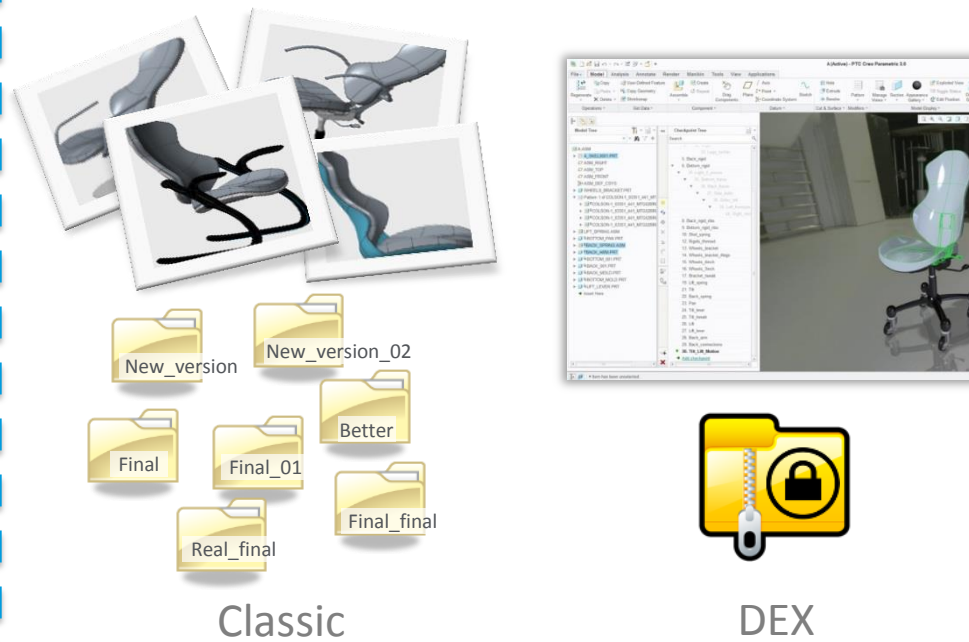
## Iterate



## DEX allows exploring x7 more design iterations

Design Exploration Extension workflow allows creating Checkpoints that backup only modified and new models. Switching checkpoints in single click – only incremental differences are reloaded.

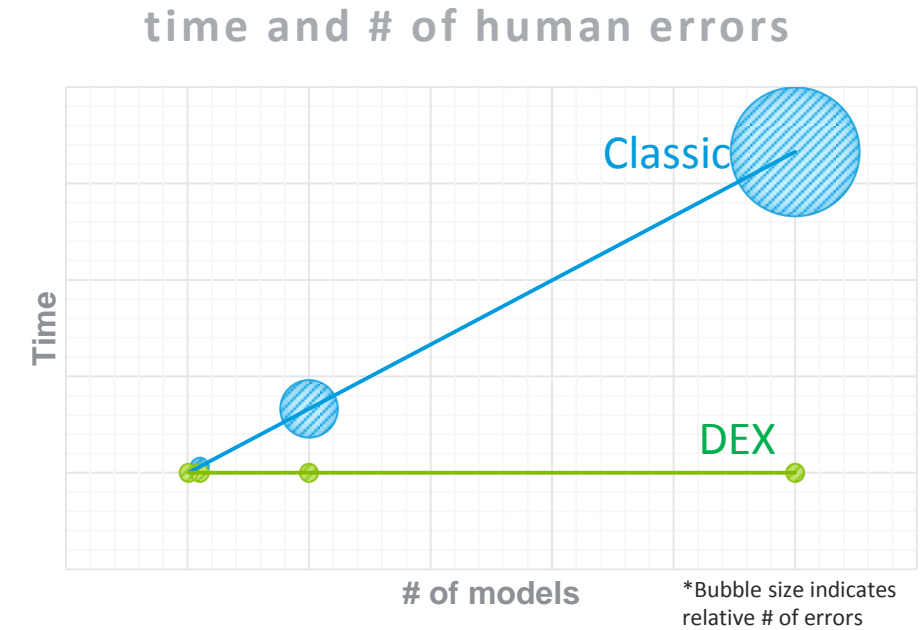
## Review and share



## DEX allows 500% more efficient review process

Design Exploration Extension workflow allows sharing a single compressed file and live instant toggle of checkpoints without data duplicates

## Integrate



## DEX allows nearly instantaneous integration and ZERO errors

Design Exploration Extension workflow allows integrating only changed and new models with a single click of accepting a checkpoint

- Your feedback is valuable
- Don't miss out on the chance to provide your feedback
- Gain a chance to win an instant prize!
- Complete your session evaluation now



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