

converge

Customer Success Conference 2019

THINK BIG GO BIG

What's New in Active Workspace

Jason Fults, Manager - Teamcenter Product Management



**THINK BIG.
GO BIG.**

- User Experience Refresh
- Table and Tree Enhancements
- Document Management
- Core Application Maturity
- Active Architect
- Active Administration



**THINK BIG.
GO BIG.**

- **User Experience Refresh**
- Table and Tree Enhancements
- Document Management
- Core Application Maturity
- Active Architect
- Active Administration

Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 - color palette

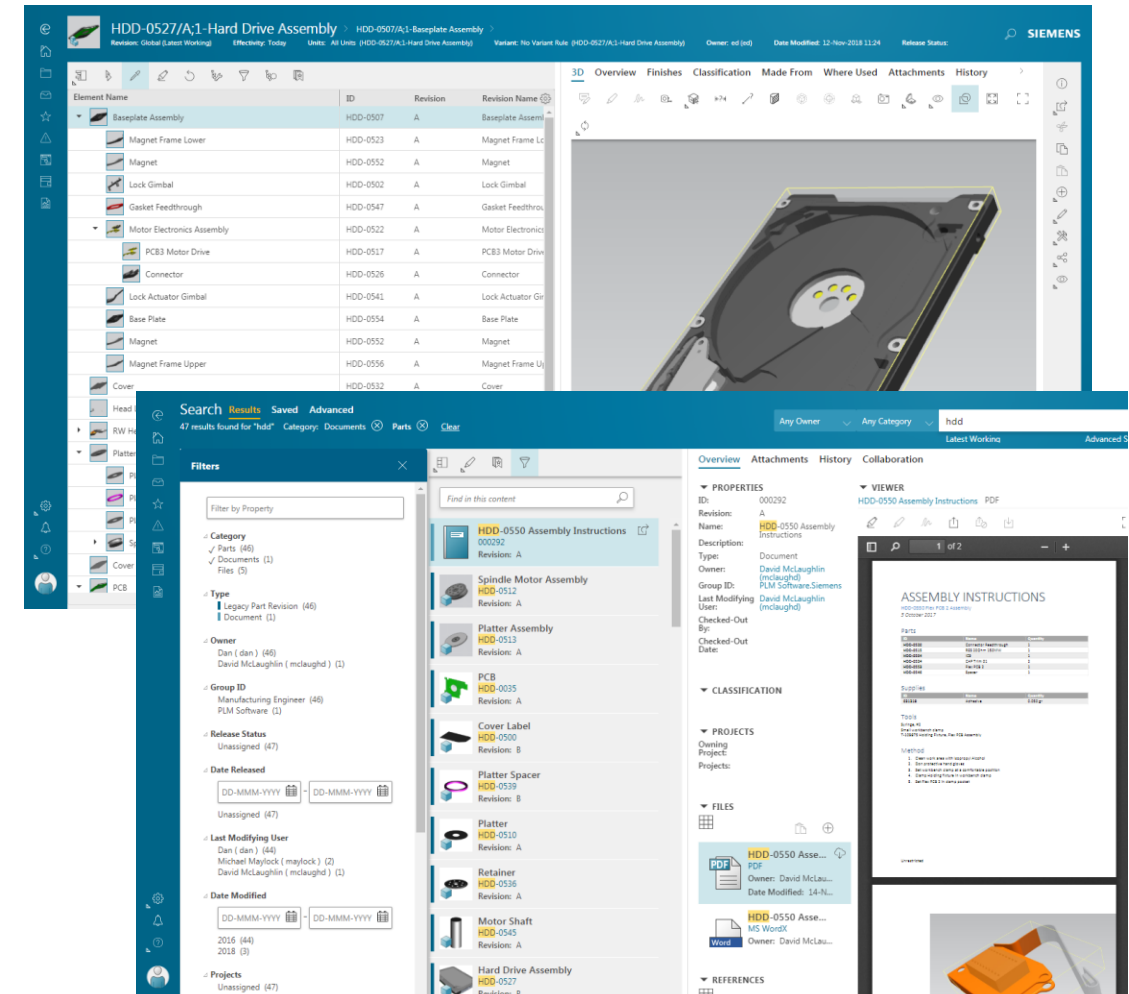


Updated color palette to improve visual appearance and to align to changes planned for other Siemens software products

- Better distinction between **“Frame”** and **“Content”**
- Better distinction between **panels** and **work areas**
- **Clarify** the **“information flow”** on the screen
- Use of **“elevation”** – shadows and responsiveness – to better **distinguish elements** and how they work together

Cross-PL Consistency

- Built on our **new PL UI framework**
- Provides a **consistent user experience** across web and cloud applications

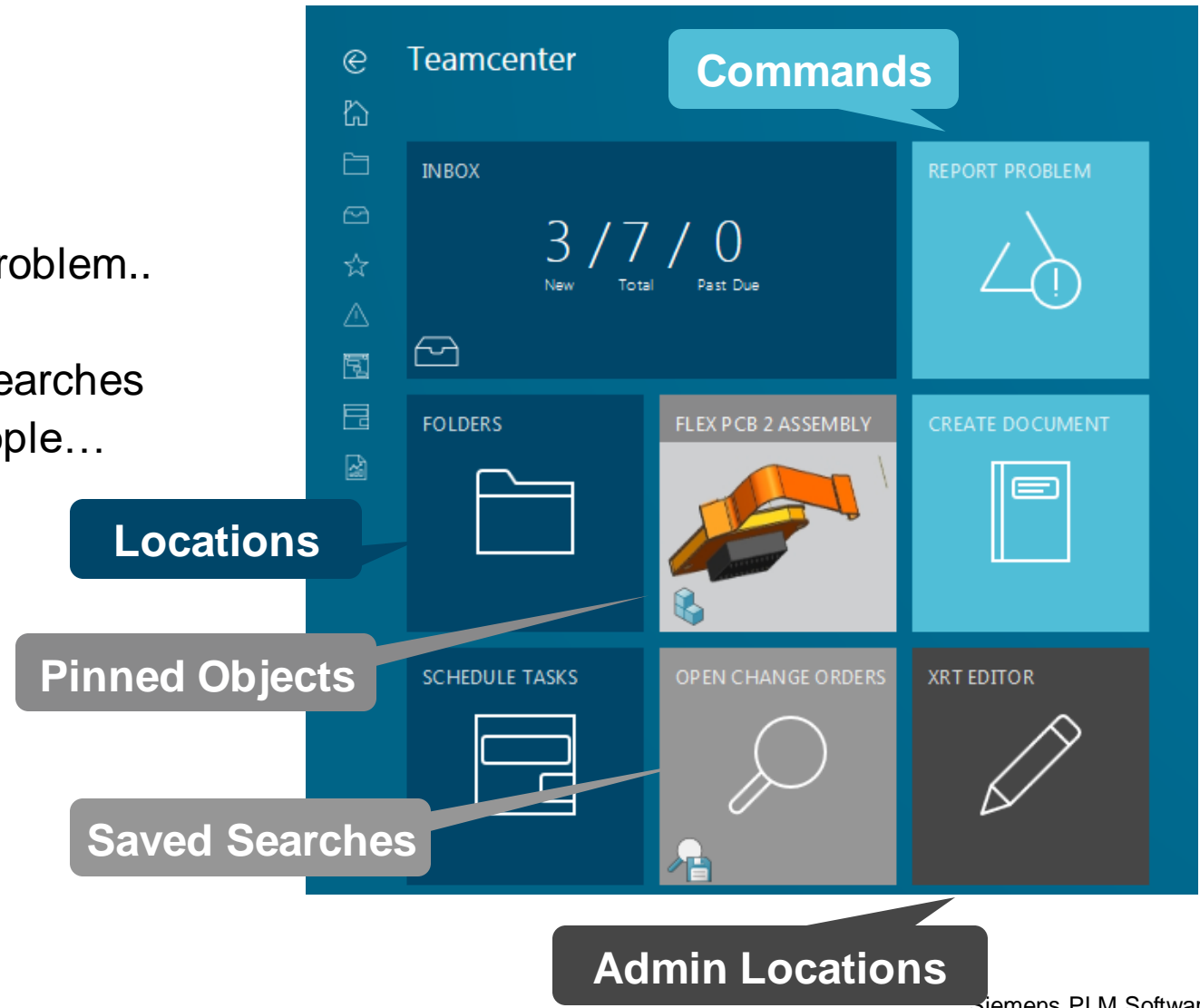


Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 - home page tiles

Consistent use of color on tiles

- Colors help users quickly find the right tile
 - **Locations** – Inbox, Folders...
 - **Commands** – Create Document, Report Problem..
 - **Pinned Objects** – Docs, Parts, Designs...
 - **Saved Searches** – Personal and shared searches
 - **Admin Locations** – Stylesheet Editor, People...



Active Workspace Framework – Compelling layout and styling

Active Workspace 4.1 – left side navigation



Quickly navigate to commonly used areas via persistent left hand toolbar:

- Home Page
- Folders
- Inbox
- Changes
- Schedules
- Schedule Tasks

Includes user and session settings

- Can be pinned open by users

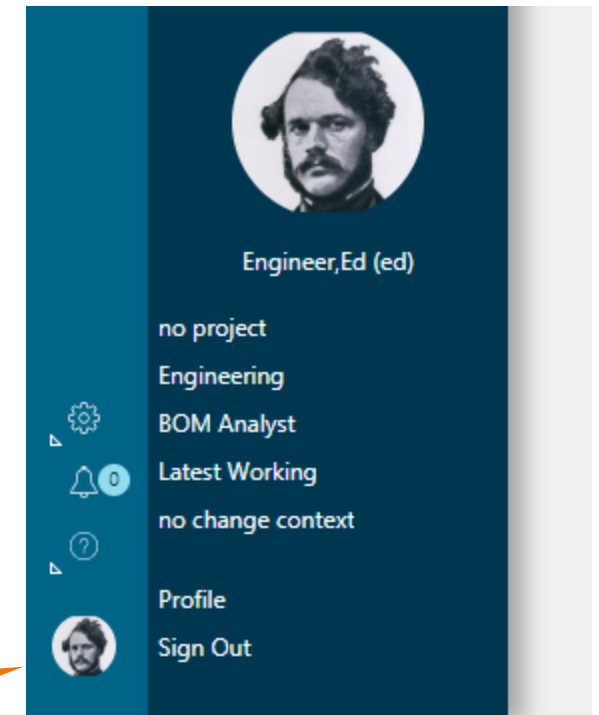
Extensible by admins

- Command bar with command panel



Direct access to frequently used pages

Your settings pop-out when clicking on your avatar



Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 - more data

SIEMENS
Ingenuity for life

Improve data density and utilization of page space

- More efficient use of elements in the header
- Maximize working area for tables, lists, content
- Two density modes: Comfortable and Compact

The image compares two versions of the Active Workspace software interface for a 'Hard Drive Assembly, Orion'. The left side shows the '4.0' version, which has a wider header and a table with 19 lines of data. The right side shows the '4.1' version, which has a more compact header and a table with 28 lines of data. Both versions include a 3D model of a hard drive and a table of assembly components.

ELEMENT NAME	ID	REVISION	REVISION NAME
Baseplate Assembly	HDD-0507	A	Baseplate Assembly
Cover x1	HDD-0532	B	Cover
Head Landing Block	HDD-0528	D	Head Landing Block
RW Head Assembly	HDD-0511	B	RW Head Assembly
Flex PCB Assembly	HDD-0535	C	Flex PCB Assembly
RW Head Spring Assembly x4	HDD-0533	A	RW Head Spring Ass
RW Head Spring	HDD-0555	A	RW Head Spring
RW Head	HDD-0537	A	RW Head
Voice Coil Gimbal	HDD-0518	A	Voice Coil Gimbal
Flex PCB 2 Assembly	HDD-0550	B	Flex PCB 2 Assembly
Connector Feedthrough	HDD-0520	A	Connector Feedthrough
RES 200HM 150MW	HDD-0515	A	RES 200HM 150MW
IC9	HDD-0504	A	IC9
CAP Trim 01 x2	HDD-0524	A	CAP Trim 01
Flex PCB 2	HDD-0553	A	Flex PCB 2
Spacer Rev	HDD-0565	B	Spacer Rev
Flex PCB	HDD-0530	A	Flex PCB
Adhesive	HDD-0509	A	Adhesive
Gimbal Armature	HDD-0509	C	Gimbal Armature

Element Name	ID	Revision	Revision Name
Baseplate Assembly	HDD-0507	A	Baseplate Assembly
Cover	HDD-0532	A	Cover
Head Landing Block	HDD-0528	A	Head Landing Block
RW Head Assembly	HDD-0511	A	RW Head Assembly
Flex PCB Assembly	HDD-0535	A	Flex PCB Assembly
RW Head Spring Assembly	HDD-0533	A	RW Head Spring Ass
RW Head Spring Assembly	HDD-0533	A	RW Head Spring Ass
RW Head Spring Assembly	HDD-0533	A	RW Head Spring Ass
Voice Coil Gimbal	HDD-0518	A	Voice Coil Gimbal
RW Head Spring Assembly	HDD-0533	A	RW Head Spring Ass
Flex PCB 2 Assembly	HDD-0550	A	Flex PCB 2 Assembly
Gimbal Armature	HDD-0509	A	Gimbal Armature
Gimbal Spindle	HDD-0540	A	Gimbal Spindle
Gimbal Bearing	HDD-0534	A	Gimbal Bearing
Nut Spindle	HDD-0519	A	Nut Spindle
Gimbal Hub	HDD-0519	A	Gimbal Hub
Gimbal Axle	HDD-0544	A	Gimbal Axle
Gimbal Bearing	HDD-0544	A	Gimbal Bearing
Platter Assembly	HDD-0510	A	Platter Assembly
Platter	HDD-0510	A	Platter
Platter	HDD-0510	A	Platter
Spindle Motor Assembly	HDD-0512	A	Spindle Motor Ass
Cover Label	HDD-0500	A	Cover Label
PCB	HDD-0535	A	PCB

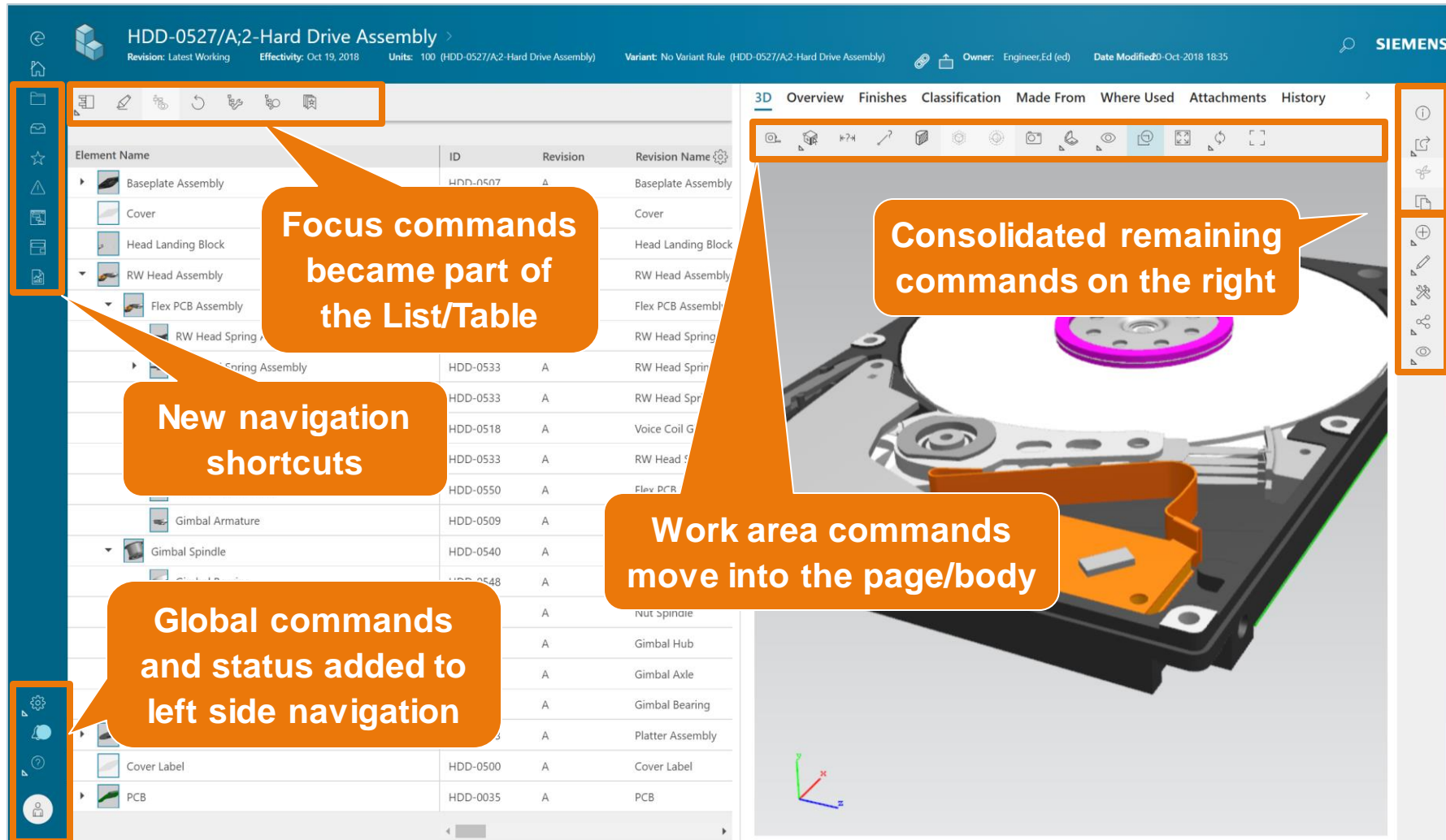
19 lines
4.0

21 lines
4.1 Comfortable

28 lines
4.1 Compact

Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 - simplified command locations



Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 - list/table focus commands

Reorganize commands – easier to learn and more productive to use

- Relocate key commands to the **top of the list/table**
 - Display controls
 - Filter
 - Find in content
 - Configure
 - Manipulate content
 - Promote
 - Demote
 - Move up/down

The screenshot displays the Siemens Active Workspace interface. At the top, a blue header bar contains the breadcrumb 'REQ-004221/A;1-Project Management' and other metadata like 'Revision: Global (Latest Working)' and 'Effectivity: Today'. Below the header is a toolbar with icons for 'Tree with Summary', 'Show Markup', 'Reset', 'Show Connection', 'Configuration', 'Navigate', 'Quick Access', 'Promote', 'Demote', 'Move Down', and 'Move Up'. The main content area is a table with columns 'Element Name', 'ID', 'Revision', and 'Revision Name'. The table lists several project elements, including 'Overview', 'Regulations, Standards, Specifications a...', 'Project Management', 'Quality Assurance (QA)', and 'Design Objectives'. An orange callout box with a white border points to the toolbar, containing the text 'Key commands above the list/table/tree display'.

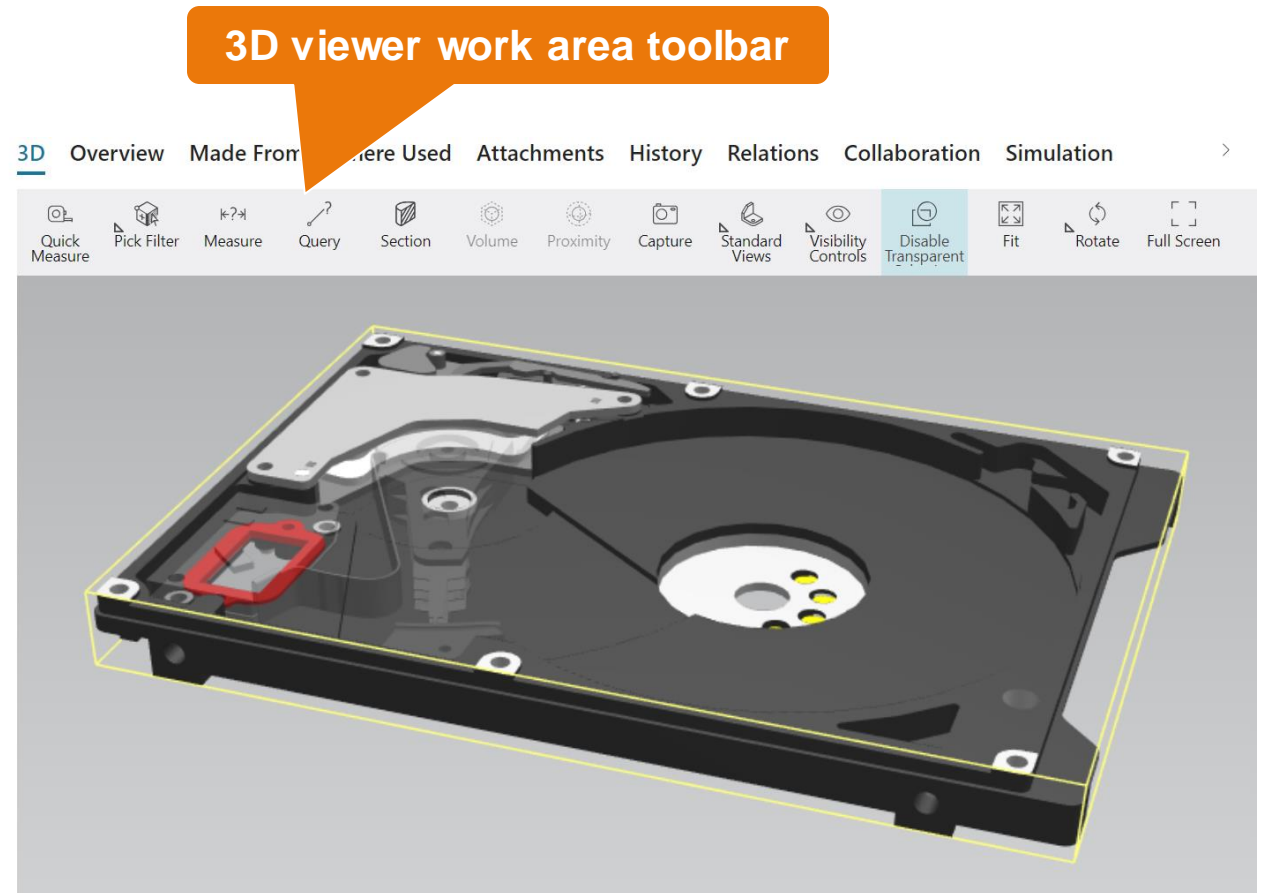
Element Name	ID	Revision	Revision Name
Overview	REQ-004222	A	Overview
Regulations, Standards, Specifications a...	004223	A	Regulations, Standards, Specificati...
Project Management		A	Project Management
Quality Assurance (QA)			(QA)
Design Objectives			

Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 – work area commands

Reorganize commands – easier to learn
and more productive to use

- **Move** key commands **into work areas** to be closer to what they act on
 - Tables
 - Viewers
 - Relations
 - Workflow
 - More...
- Commands **remain visible and never move**, but **disable** when not valid
- **Faster** loading – less commands to process

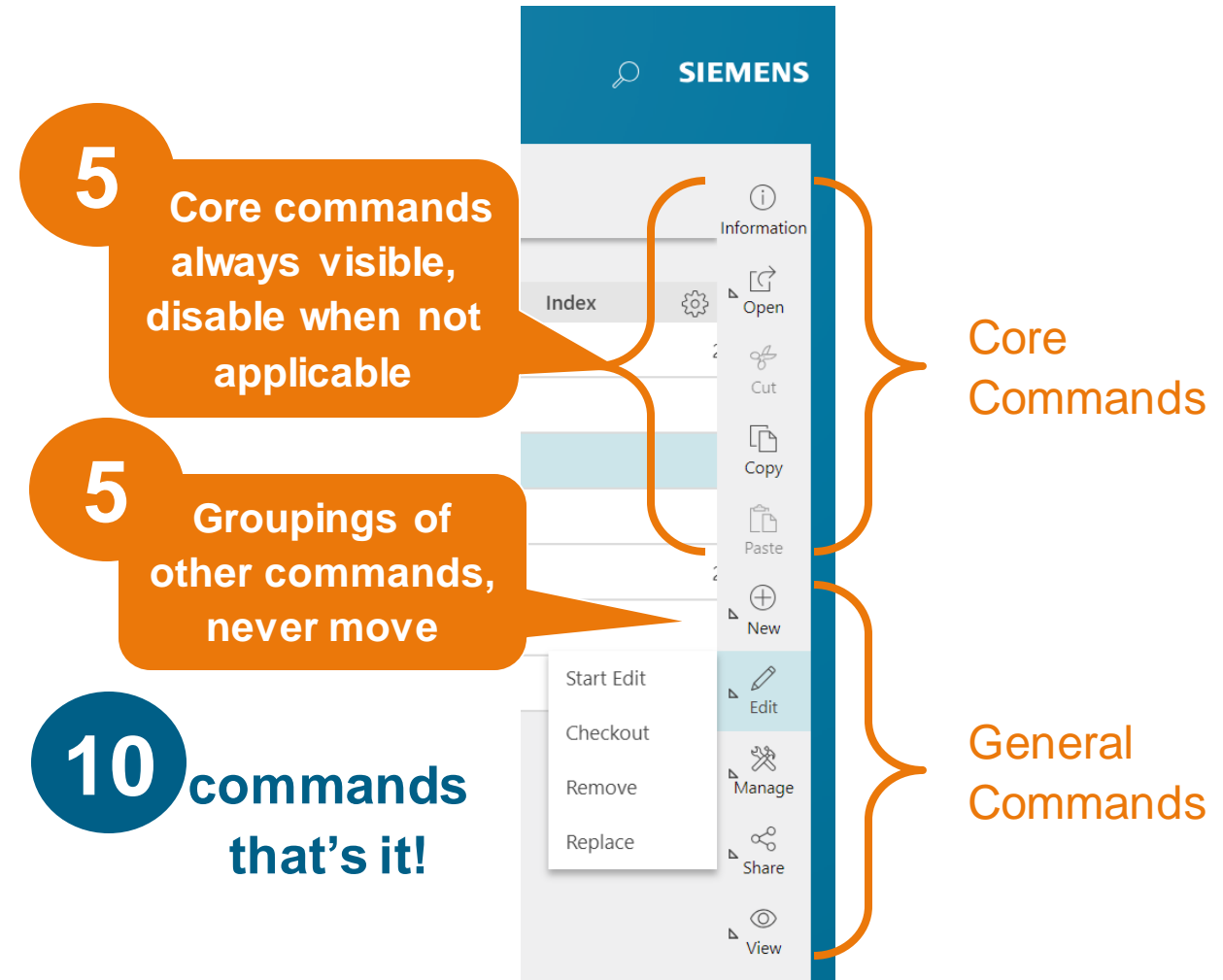


Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 - core commands

Reorganize commands – easier to learn and more productive to use

- **Core commands** remain visible and never move: **Info, Open, Cut, Copy, Paste**
- **General commands** are grouped by five simple categories that never move: **New, Edit, Manage, Share, View**
- Commands inside groups hide when not valid, to keep the menus simple
- **Easier to learn** – similar commands are grouped together
- **Faster loading** – less commands to process



Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 - layout and styling refresh



Command Panels

- Less disruptive
 - Most panels float over working areas
 - Key tasks can “push” content when needed, like markup
- Improved styling and readability
- Clearer task sections
- NO changes to work flows – no re-learning

The screenshot displays the Siemens Active Workspace 4.1 interface for document '000292/A;1-HDD-0550 Assembly Instructions'. The interface is divided into several panels:

- Left Panel (Navigation):** Contains sections for PROPERTIES, CLASSIFICATION, PROJECTS, FILES, and REFERENCES. The FILES section lists documents like 'HDD-0550 Assembly Instructions.pdf' and 'HDD-0550 Assembly Instructions...docx'.
- Top Panel (Viewer):** Shows document metadata including ID (000292), Name (HDD-0550 Assembly Instructions), and Owner (David McLaughlin).
- Main Content Area:** Displays the title 'ASSEMBLY INSTRUCTIONS' for 'HDD-0550 Flex PCB 2 Assembly' dated '5 October 2017'. It includes sections for 'Parts' (a table of components), 'Supplies' (a table of materials), and 'Tools' (a list of required tools).
- Right Panel (Create Change):** A floating panel for creating changes, showing fields for ECN Number, Revision, Synopsis, and Description, along with an 'ATTACHMENTS' section.

ID	Name	Quantity
HDD-0520	Connector Feedthrough	1
HDD-0515	RES 200hm 150MW	1
HDD-0504	IC9	1
HDD-0524	CAP Trim 01	2
HDD-0553	Flex PCB 2	1
HDD-0546	Spacer	1

ID	Name	Quantity
031318	Adhesive	0.050 gr

Tools

- Syringe, #2
- Small workbench clamp
- T-109875 Holding Fixture, Flex PCB Assembly

Method

Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 - deployment impact



What do you need to do to start using Active Workspace 4.1?

- **No changes to stylesheets** – all current XRT elements are supported
- **No changes to command panels and flows** – styling changes only

But what if you have customizations?

- **Custom elements** that defined their own styling will need updates to match the new styling
 - Might be a good time to reuse the OOTB css/sass variables
- **New commands / changed placements** may need to be updated
 - Commands in work areas (within pages) should work unchanged
 - Commands in toolbars will need to be moved to the new toolbars/groups
 - Same method for defining placements, needs an entry for the new UI Anchor
- **Themes** will have to be updated using a simpler set of Sass variables

```
"checkoutOneStep": {  
  "id": "Awp0Checkout",  
  "uiAnchor": "aw_rightWall",  
  "priority": 200,  
  "parentGroupId": "Awp0EditGroup"
```

Command placement in
new Edit group in the
right wall toolbar

Active Workspace Framework- Compelling layout and styling

Active Workspace 4.1 - customer feedback



Feedback from two Early Customer Involvement meetings: ~70 participants

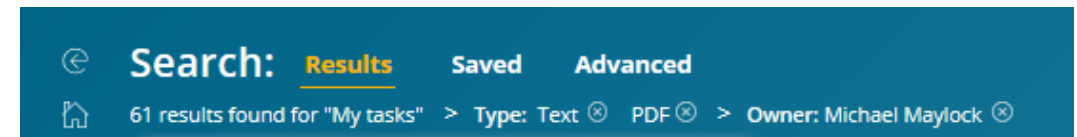
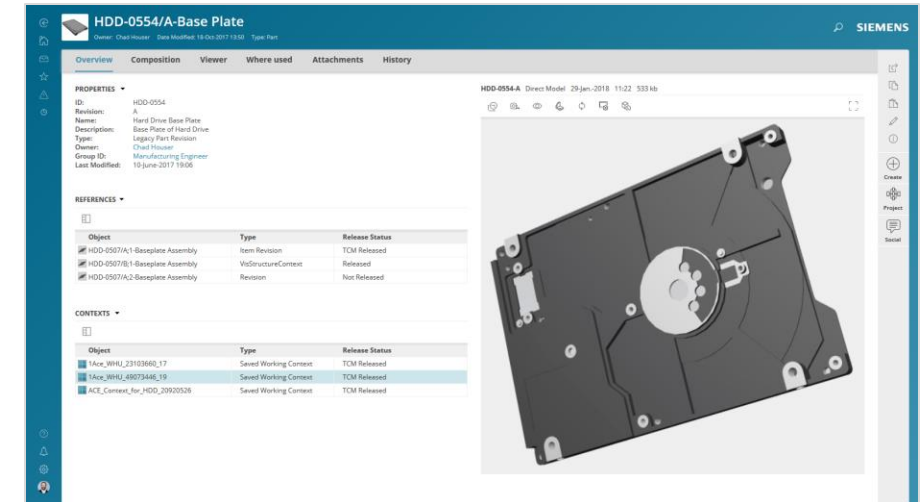
- 87% Preferred the New Styling/Theme
- 94% Preferred the New Layout
- 96% Felt it would be Easier to Learn for a New User
- 97% Felt it would be More Productive for an Experienced User

Verified command locations with users

- 88% found **navigation panel** commands easily
- 81% found **work area** commands easily
- 81% found **general** commands easily
- 100% found all commands with a little exploration

Implementation

- 79% Expect to deploy 4.1 within 12 months of release
- 75% Expect only minimal (10-30mins) or no re-training

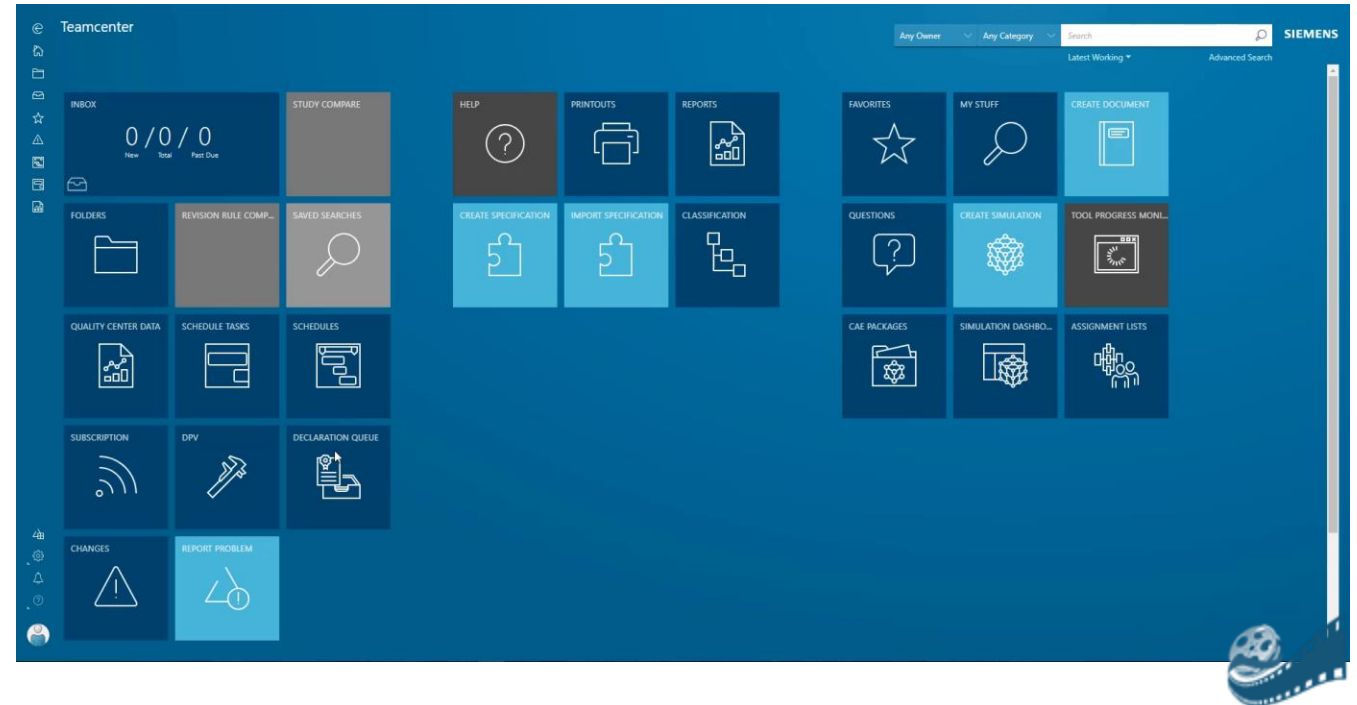


Active Workspace 4.2

Usability – drag and drop targets

Improved discoverability of drag & drop

- **Drop targets highlight** as soon as something is dragged into the browser window
- **Individual objects** that can be drop targets within a list **highlight when dragged over**
- Cursor and tooltips indicate what will happen on a given drop action





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GO BIG.**

- User Experience Refresh
- **Table and Tree Enhancements**
- Document Management
- Core Application Maturity
- Active Architect
- Active Administration

Active Workspace Framework - User Efficiency

Active Workspace 4.1 - faster table display



Faster initial load time and smoother interaction

- Applies to object sets and primary work area tables
- Does not apply to other special tables and tree table display

One object set table with 70 columns in IE...

Active Workspace 4.0

OBJECT	TYPE	NAME	DESCRIPTION	OWNER	GROUP ID	DATE MODIFIED	RELEASE STATUS	UNIT OF MEAS
01010101.1	Item Revision	14 ObjectSet Tables	rev	Rogers.Ken (spkern)	Engineering	03-Oct-2018 12:58		
01010101.1	Item Revision	14 table_one_row	row	Rogers.Ken (spkern)	test	19-Oct-2018 14:54		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	28-Sep-2018 02:47		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
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01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		

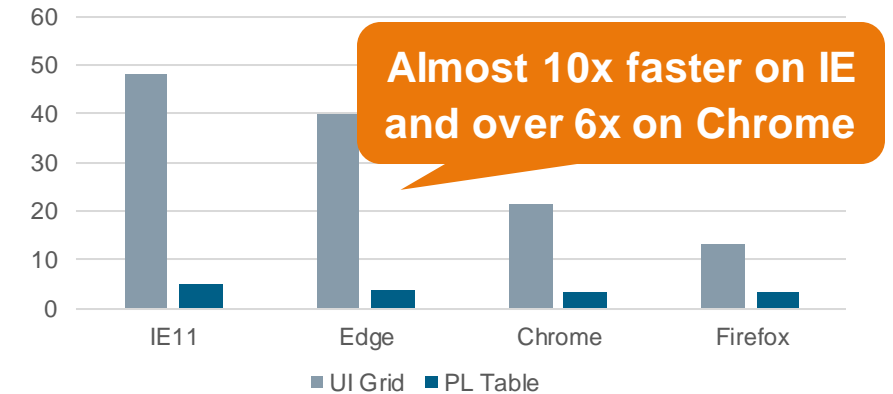
~ 23 Seconds

Active Workspace 4.1

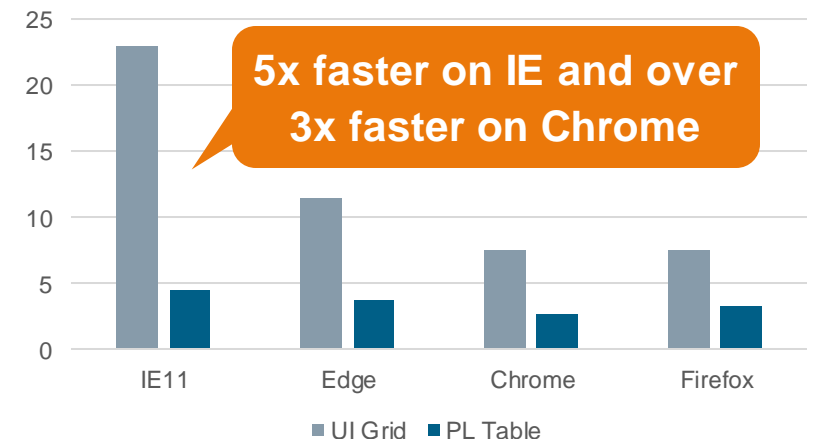
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01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		
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01010101.1	Item Revision	14 table_20_rows	row	Rogers.Ken (spkern)	test	02-Sep-2018 09:24		

~ 4 Seconds

14 Object Set Tables with 10 Rows Each



One Object Set Table with 70 Columns



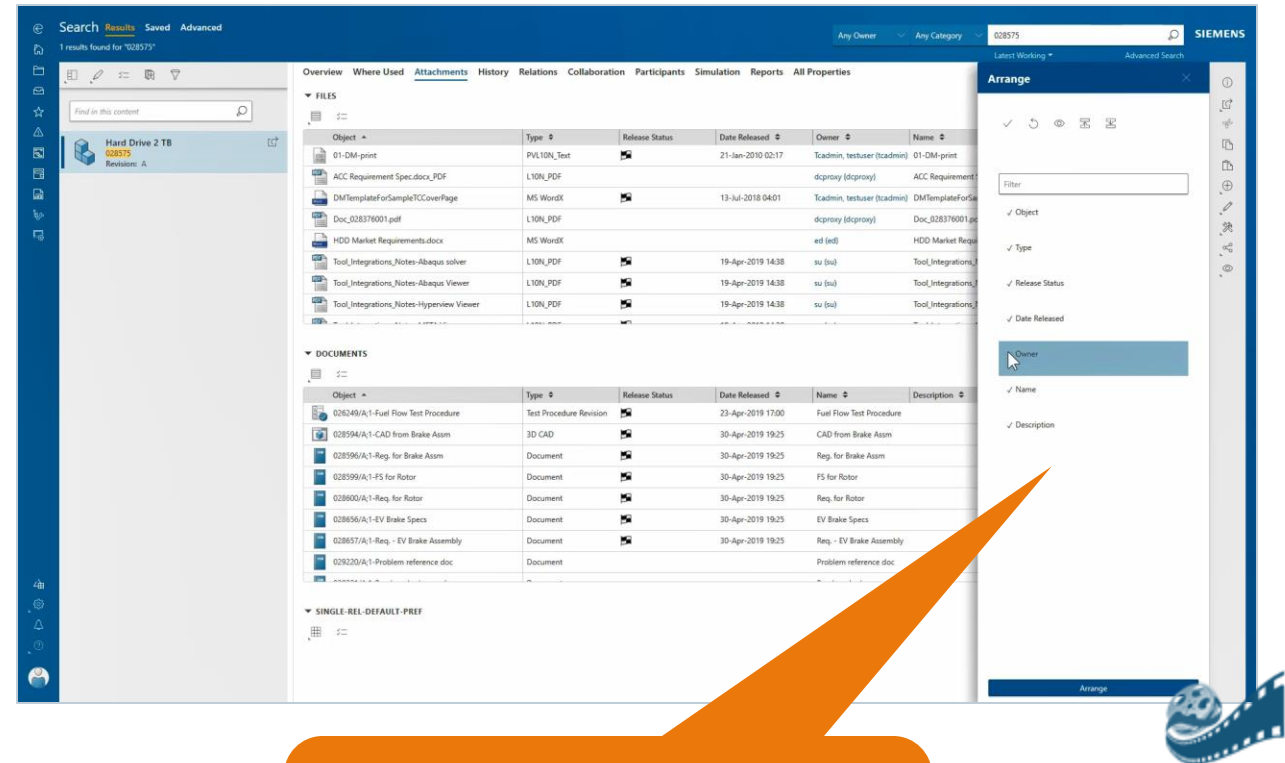
Active Workspace 4.2

Usability – configurable object set columns



Personalize summary view tables to choose what information to display

- **Users** can **personalize** the columns shown, as well as their order and width
- To do so, **administrators** must define the object set to **reference a column configuration**
- As a result, administrators can configure:
 - What columns are **visible** as before
 - What additional columns are **available** for users to choose to display



Column configuration for the files table allows for personalization

Active Workspace 4.2

Usability – configurable object set columns configuration

For a table to be personalized, an administrator has to pre-configure each ObjectSet to leverage a column configuration definition as shown

```
<page titleKey="attachments">
  <section titleKey="Teamcenter_xrt_Files">
    <objectSet source="IMAN_specification.Dataset,IMAN_reference.Dataset,...
      defaultdisplay="listDisplay"
      sortBy="object_string"
      sortdirection="ascending">
    <tableDisplay objectSetUri="myFilesColumnConfig">
      <property name="object_name"/>
      <property name="object_desc"/>
      ...
    </tableDisplay>
```

Defines the column configuration used

Properties are ignored because of the objectSetUri defines the columns used

Without ignored properties

--- OR ---

```
<tableDisplay objectSetUri="myFilesColumnConfig"/>
```


Active Workspace 4.2

Usability – configurable object set columns configuration

And here is a example of the column configuration referenced

```
<ClientScope hostingClientName="" name="myColConfigName" uri="myFilesColumnConfig">
  <ColumnConfig columnConfigId="mySpecialConfigID" sortBy="1" sortDirection="Descending">
    <ColumnDef propertyName="object_string" ... />
    <ColumnDef propertyName="object_type" ... />
    ...
  </ColumnConfig>
</ClientScope>
```

Same URI

Columns to include in the objectSet

Active Workspace 4.2

Usability – column filtering

Filter content shown in tables through the column header to find information faster

- Supported in **summary view tables** and **folders** such as the home folder
- Supports **text**, **number**, and **date** filters
- Enumerated value filters similar to Excel filters is planned for a future release, e.g. toggles to choose values

Name	Description	Release Status	Checked-Out	Checked-O...	In Process
Bearing Small	HDD-0508				
Platter Assembly	Platter Assembly				
Gimbal Spindle	HDD-0540				
Motor Shaft	HDD-0545				
Platter Armature	HDD-0516				
Platter Spacer	HDD-0539				
pd1					
Newstuff	ed				

☒ Freeze

Text Filter:

release

Remove Filter

Text filter in column header

Date Released

Sort Ascending

Sort Descending

No Sorting

Freeze

Date Filter:

30-Jan-2018

03-May-2019

Remove Filter

Date filter in column header

Sort Ascending

Sort Descending

No Sorting

Freeze

Numeric Filter:

Equals

Remove Filter












Numeric filter in column header

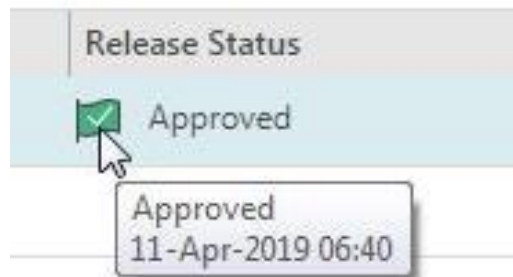
Active Workspace 4.2

Usability – graphical property renderers

Graphical property renderers save space and add clarity

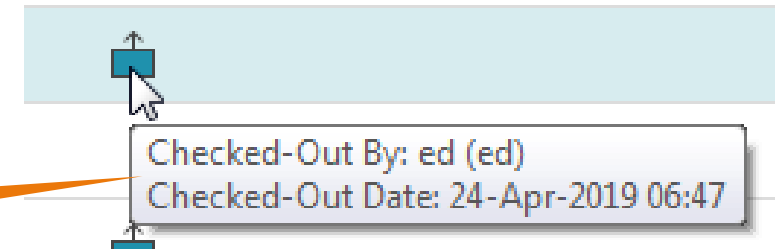
- When configured, properties display as an **indicator icon** based upon the property value
- Out-of-the-box **release status** and **check out state** display as icons
- Now supported in **tables** and **tree tables** in addition to list tiles
- **Configurable** for any property

Name ▾	Description ▾	Release Status	Checked-Out ▾	Checked-O... ▾
 Bearing Small	HDD-0508			
 Platter Assembly	Platter Assembly			
 Gimbal Spindle	HDD-0540			ed (ed)
 Motor Shaft	HDD-0545			ed (ed)
 Platter Armature	HDD-0516			
 Platter Spacer	HDD-0539			



Meaningful tooltips

Release status and checked out indicators shown in context



Active Workspace 4.2

Usability – graphical property renderer configuration

Example propertyRendererTemplates.json file

Array of columns
where applied

Array of properties to
show on hover over

Lodash template used
for rendering can be
inline or defined in a file

Optionally can use a
JavaScript function

```
{
  "release_status_template": {
    "grids": [],
    "columns": [ "release_status_list" ],
    "tooltip": [ "object_name", "date_released" ],
    "template": "",
    "templateUrl": "/propRenderTemplates/releaseStatusRenderer.html",
    "renderFunction": "",
    "dependentServices": [ "soa_kernel_clientDataModel" ]
  },
  "release_status_with_custom_fn": {
    "grids": ["customGrid"],
    "columns": [ "release_status_list" ],
    "template": "",
    "templateUrl": "",
    "renderFunction": "releaseStatusRendererFn",
    "deps": "propRenderTemplates/generateReleaseStatus",
    "dependentServices": []
  }
}
```

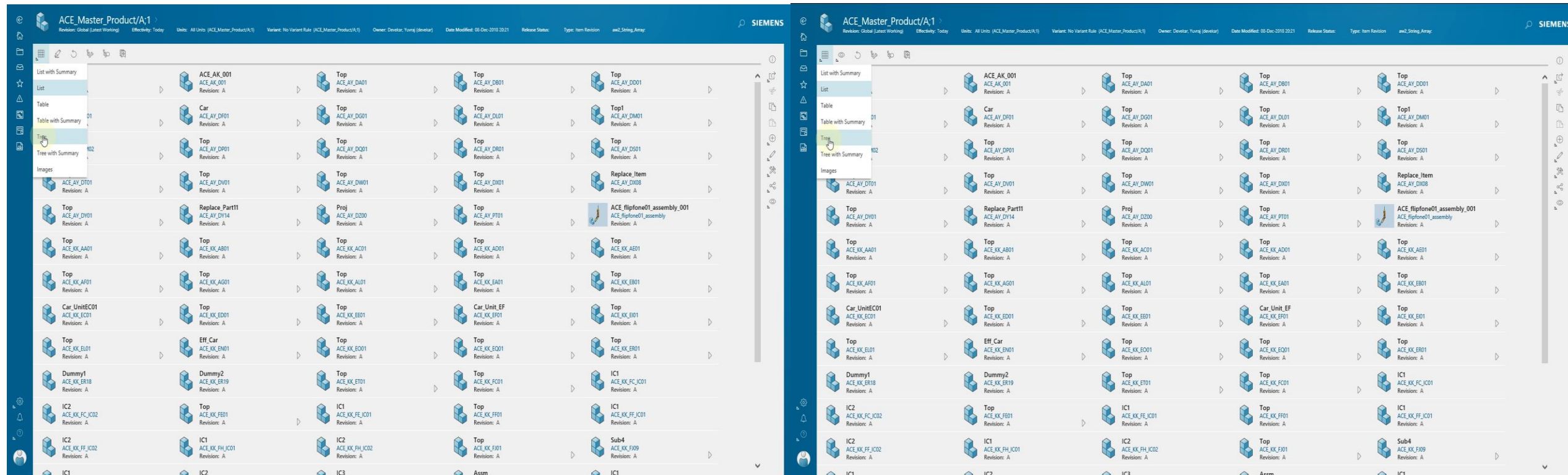
Array of tables where
applied, if blank implies all

Active Workspace 4.2

Solution enablement – performance improvements trees



2X improvement loading a structure tree with 40 columns of data in Internet Explorer



Active Workspace 4.1 – UI Grid
~ 9.5 Seconds

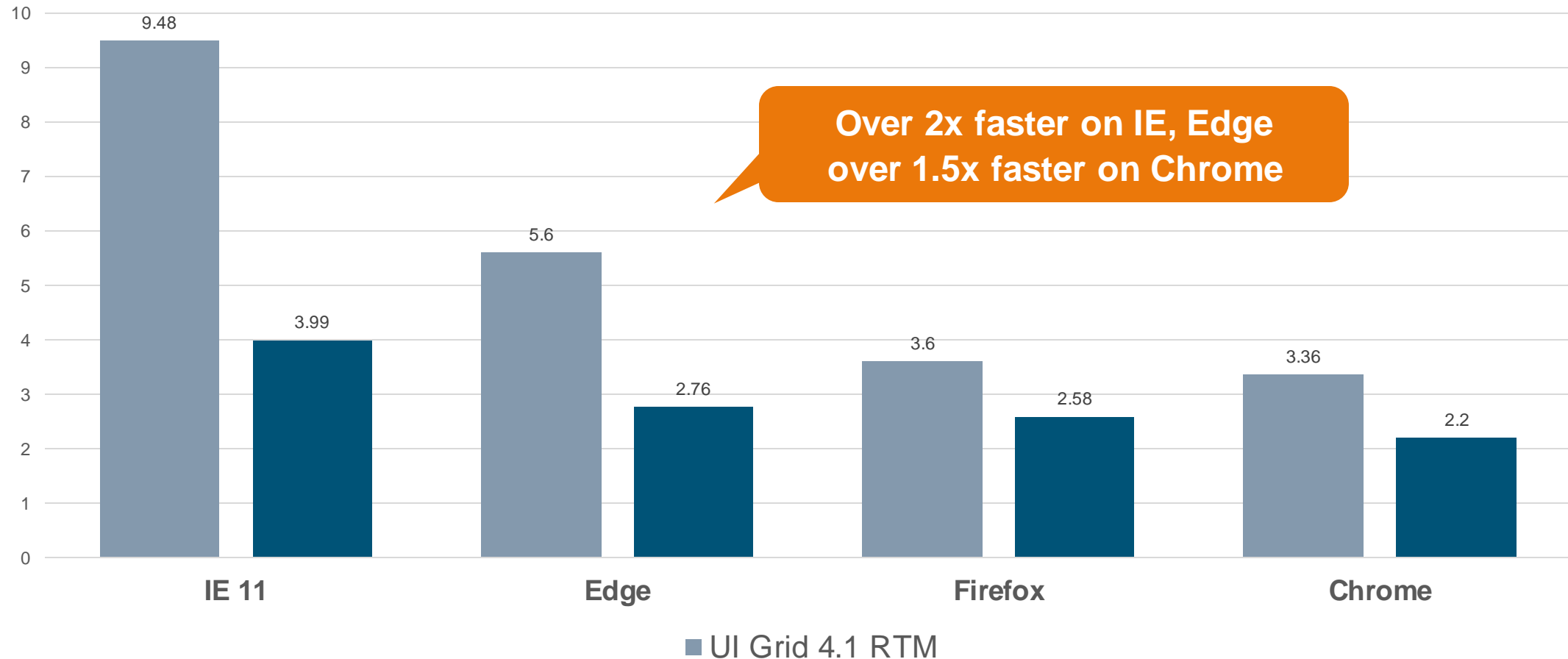
Go

Active Workspace 4.2 – PL Table
~ 4 Seconds

Active Workspace 4.2

Solution enablement – performance improvements trees

Page Load with a Tree Containing 40 Columns





**THINK BIG.
GO BIG.**

- User Experience Refresh
- Table and Tree Enhancements
- **Document Management**
- Core Application Maturity
- Active Architect
- Active Administration

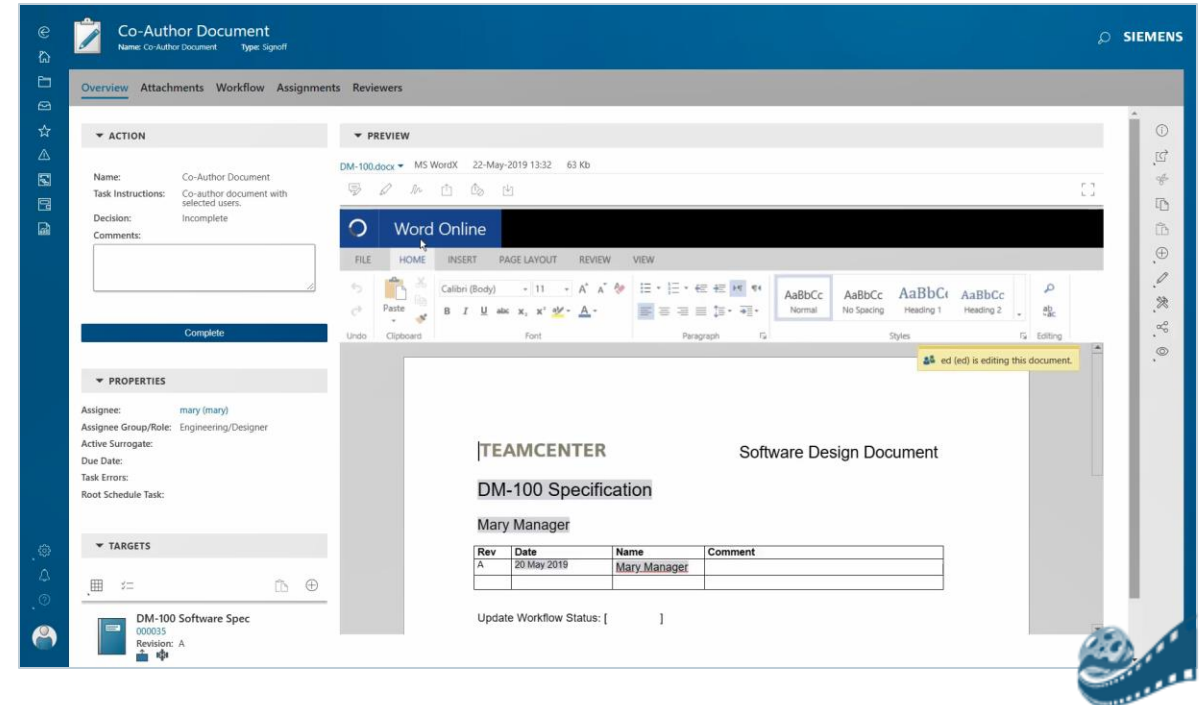
Active Workspace 4.2

Document management – co-author



Collaboratively author Microsoft Office files with Teamcenter Office Online^{12.2}

- **Share Office files** with a group of Teamcenter users
- **Collaboratively, concurrently edit** the file
- **All changes** during the collaborative session are changed and **available to the group**
- Install **Teamcenter Office Online** from **TEM**



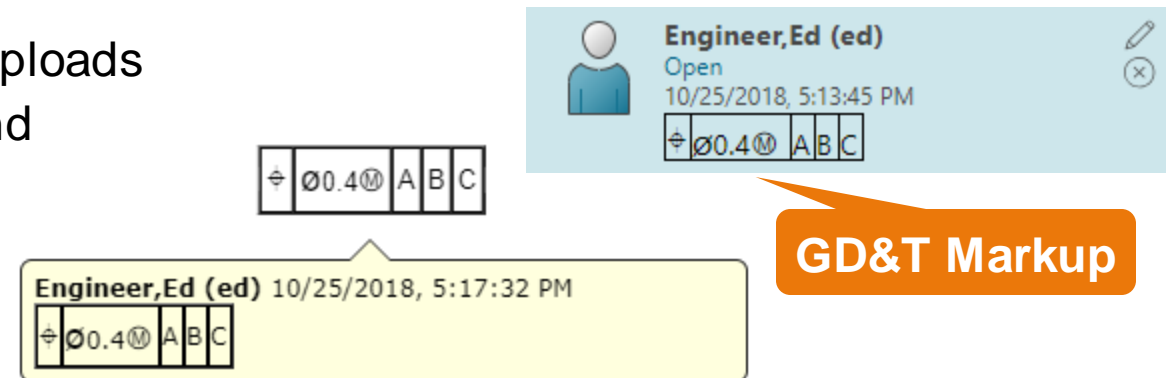
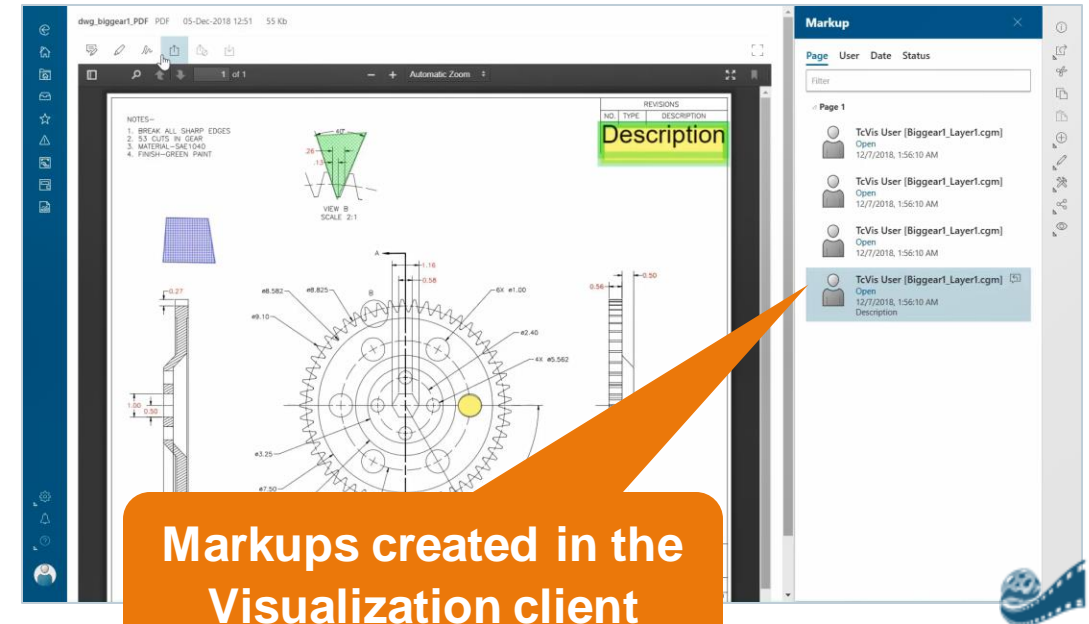
Document management

Active Workspace 4.1 – consistent markup tools



Continued enhancements in markup to provide more consistency between tools^{11.6 / 12.1}

- **View markup** created within the **Visualization** client
- **Format** both markup **text** and **graphics**: font, style, color, fill, etc.
- Add **GD&T** markup
- **Render PDF on demand**
 - Support markup without workflow or additional file uploads
 - PDF includes required print stamps, watermarks, and distribution statements
 - Relationship is maintained to document revision



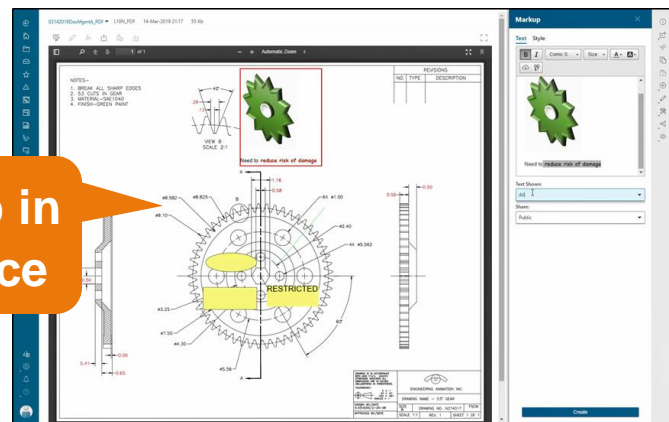
Active Workspace 4.2

Document management – view markup in Vis

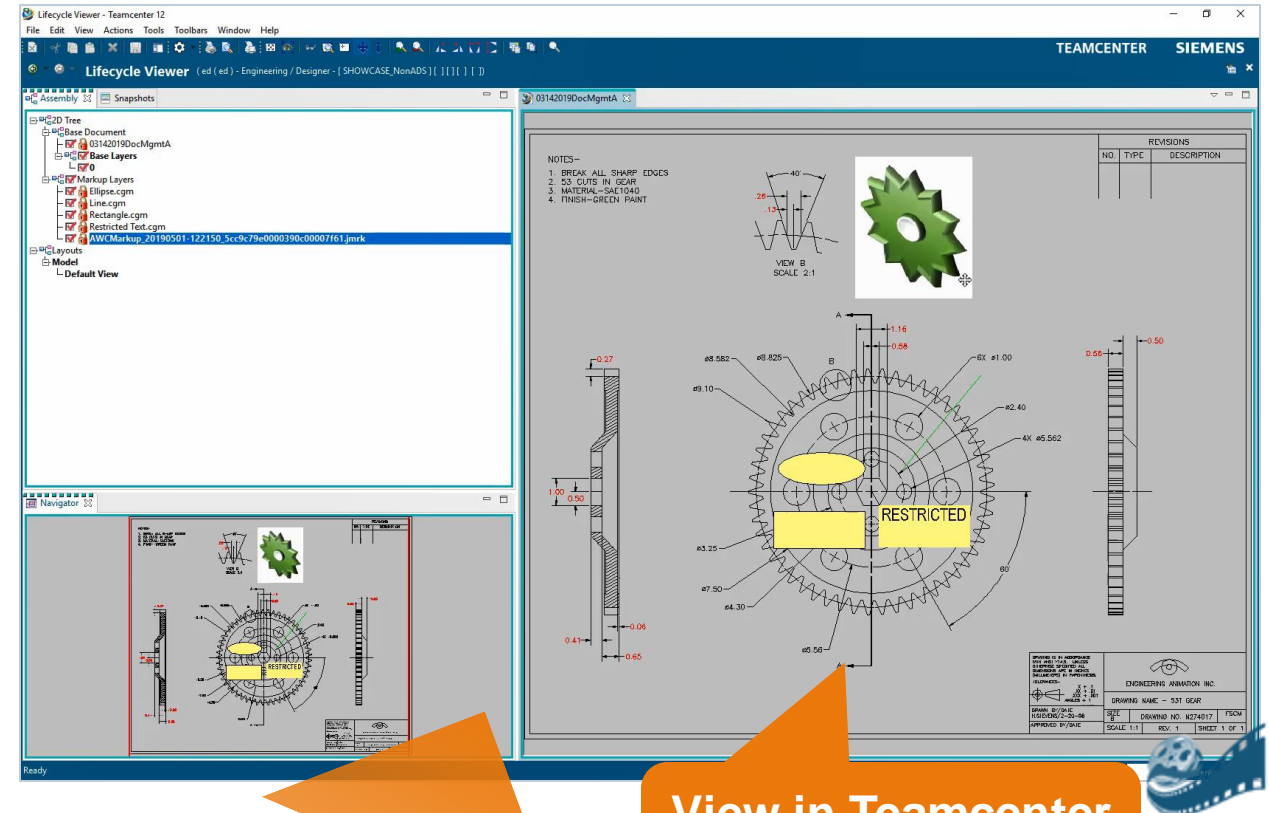


View markup created in Active Workspace in Teamcenter Visualization^{12.2}

- **Format comments to add clarity**, by changing font, color and bold or italic for emphasis
- **Upload images to add context** or additional information as markup



1 Create markup in Active Workspace



2 View in Teamcenter Visualization

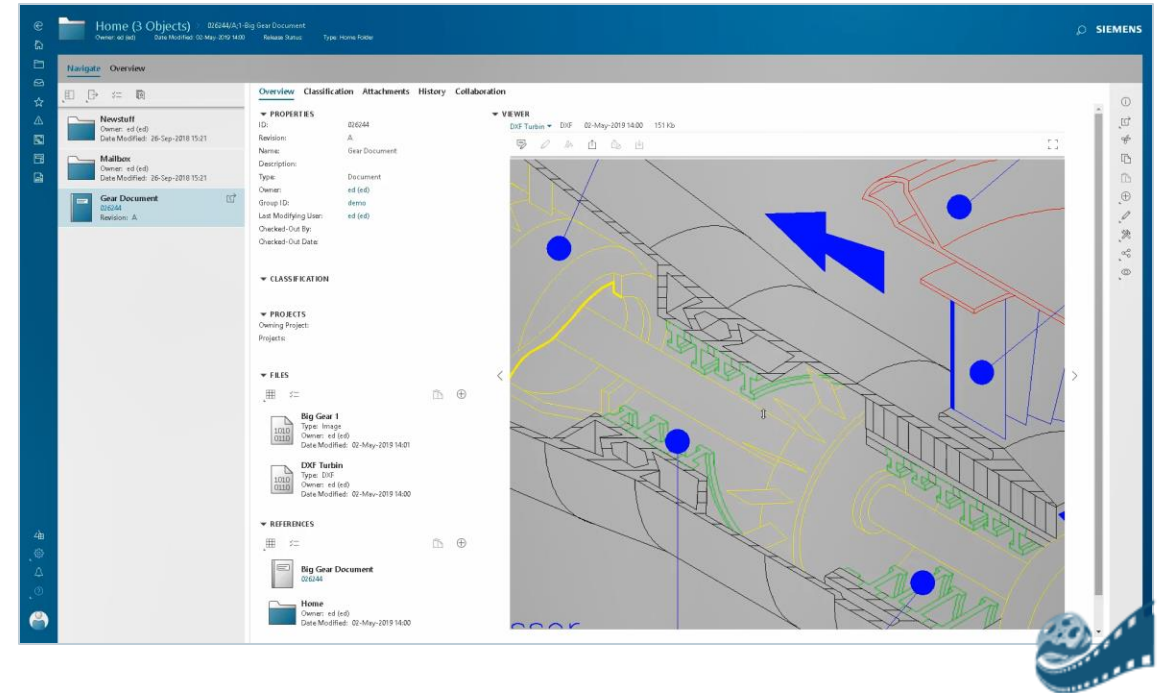
Active Workspace 4.2

Document management – viewing drawings



View multiple 2D drawing formats in Active Workspace without any client plugins^{12.2}

- View **TIFF, HPGL and DXF** datasets out-of-the-box
- Leverages the VisServer to render native drawings without any client install
- Preference update to allow VisServer to process several 2D drawing formats
 - Update
`AWC_defaultViewerConfig.VIEWERCONFIG`
 - Remove value `Image.Awp0ImageViewer=Image`
 - Add value `Image.Awp02dViewer=Image`
 - Add 2D drawing formats as “Image” datasets
- Features include **zooming, panning, page control** and support for markup

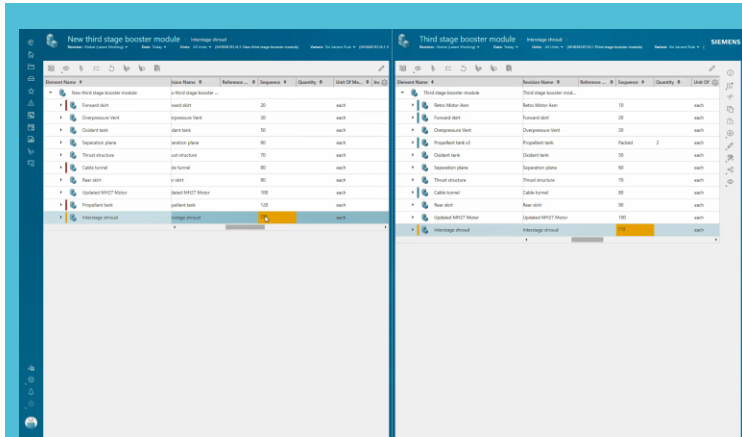




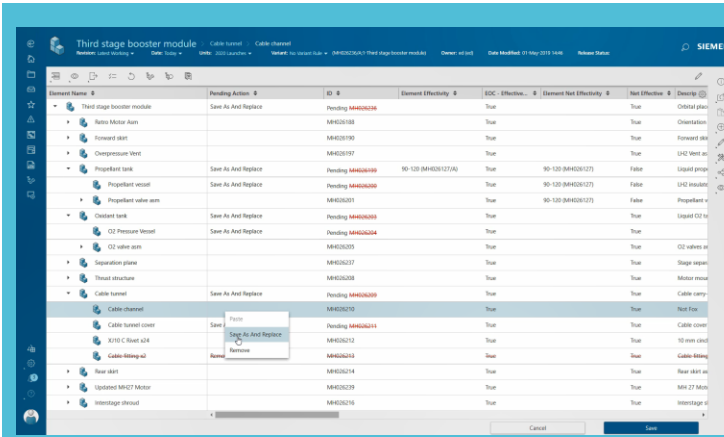
**THINK BIG.
GO BIG.**

- User Experience Refresh
- Table and Tree Enhancements
- Document Management
- **Core Application Maturity**
- Active Architect
- Active Administration

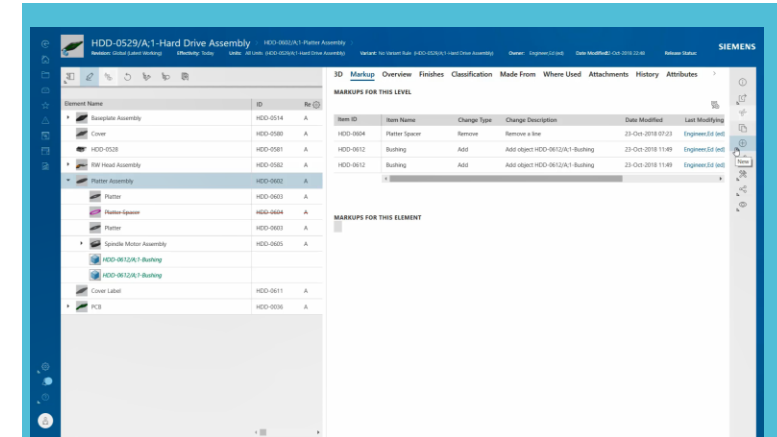
Core Application Maturity Structure Management



BOM Compare – Split the display to easily compare two revisions or configurations of the same structure



Derive Structure - Identify all desired actions for duplicating a structure and collectively execute in one step

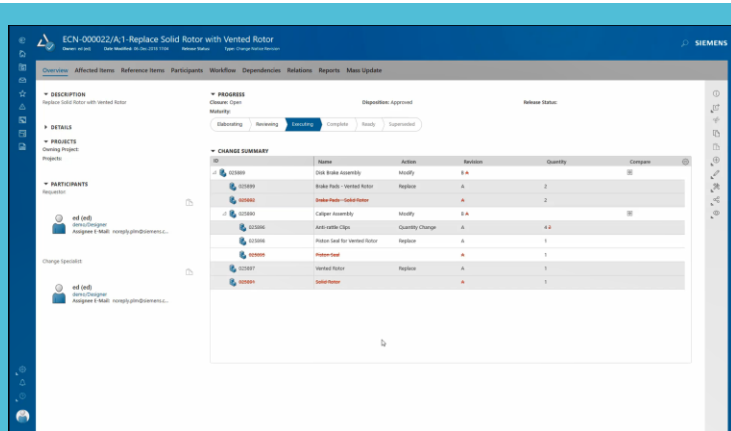


BOM Markup – Use for collaboration or change proposals without committing changes

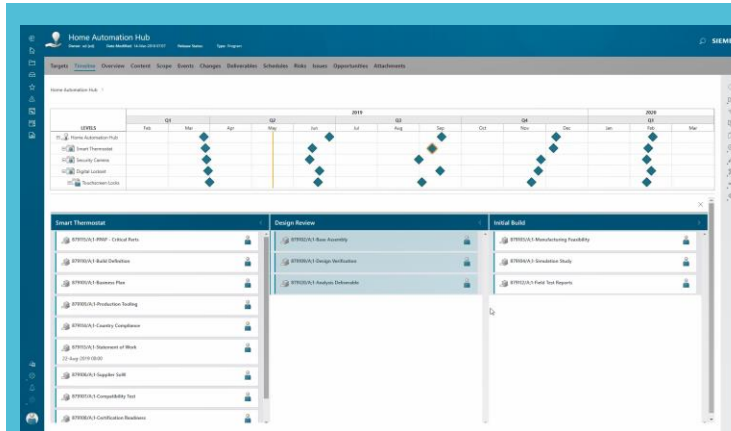
Core Application Maturity

Change and Process Management

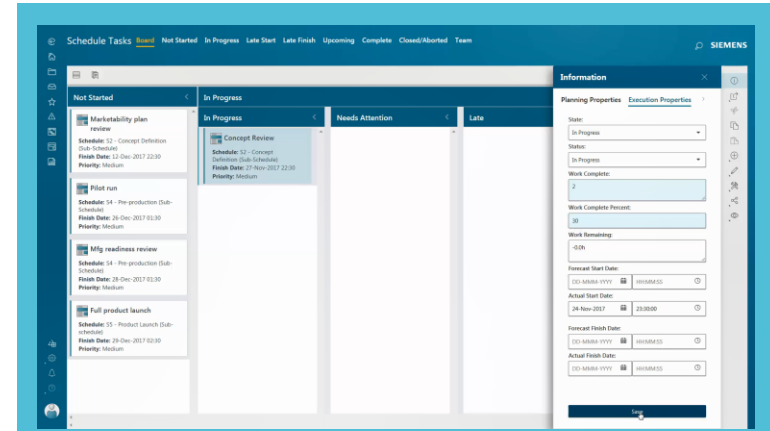
SIEMENS
Ingenuity for life



Compare Change – Build up change using Change Context and Compare using redlines



Program Board - Use a program board to quickly plan and distribute work relevant to program timing



Task Board - Identify and setup dependencies between program deliverables and sequence the work in an event for better planning and avoiding rework



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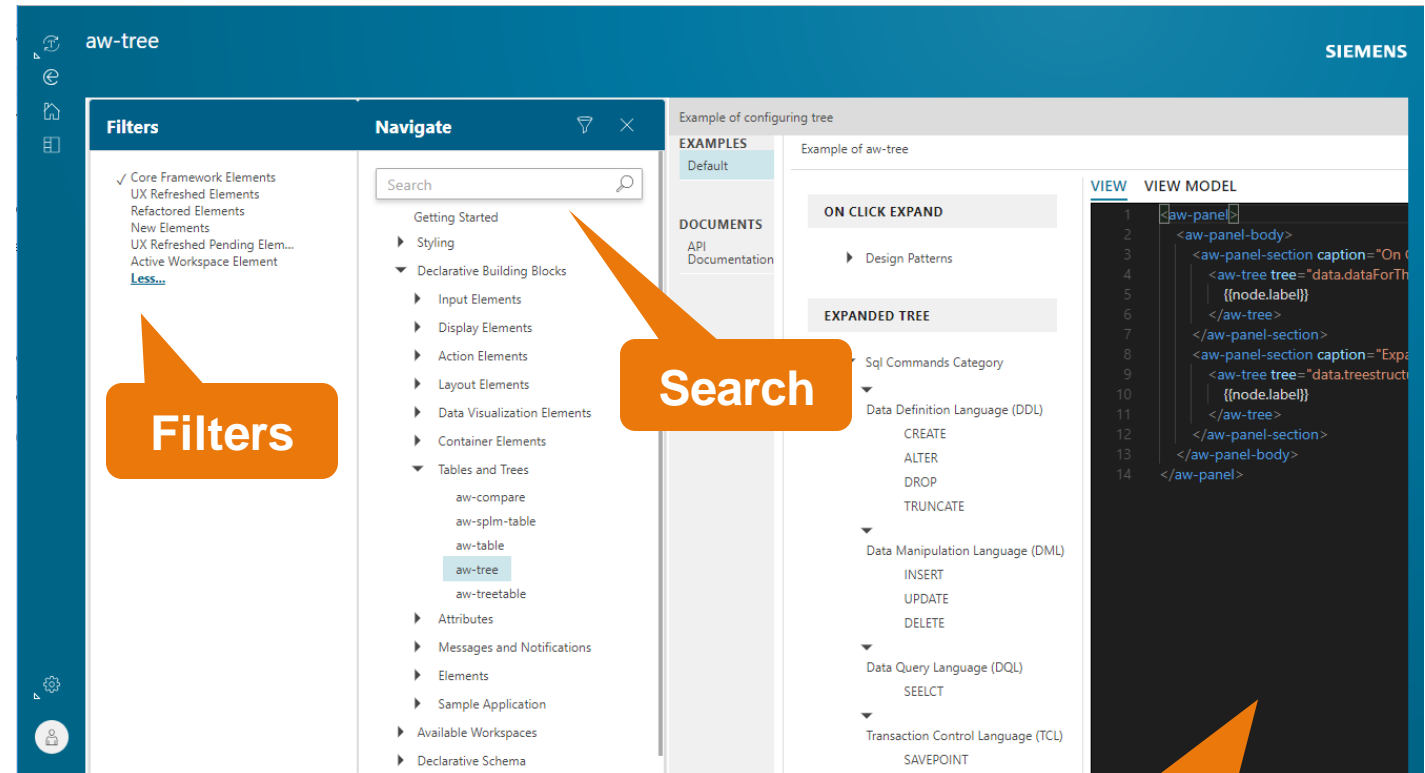
Active Workspace 4.1

Framework extensibility – UI pattern library improvements



Usability and content improvement to support building client extensions

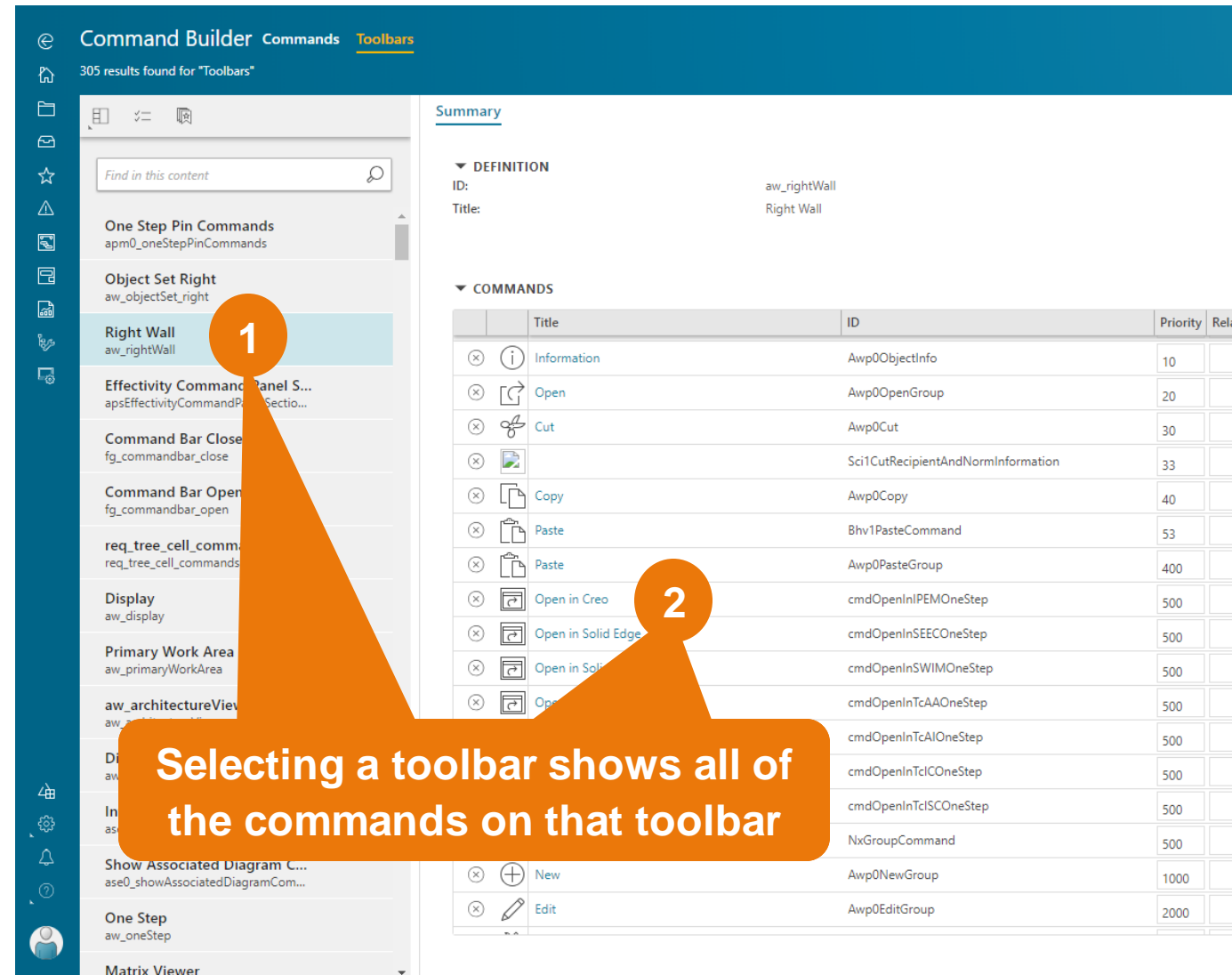
- Use **Filter** and **search** to more quickly find UI elements
- Navigate UI elements more easily via a logical **grouping** of element types
- Find and leverage many **new UI elements**
- **Improved examples** and **documentation** updated for Active Workspace 4.1's new layout and styling



Active Workspace 4.2

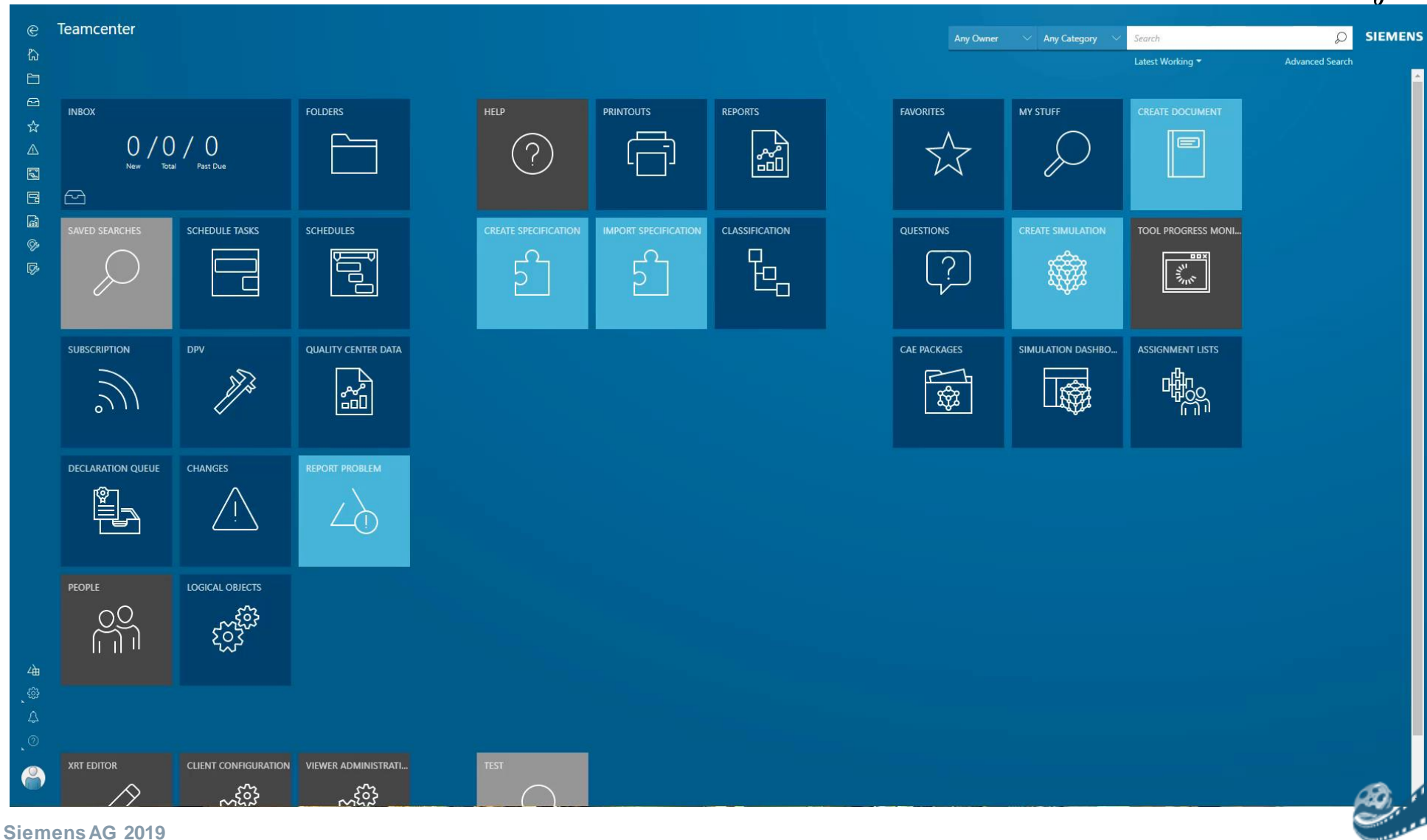
Deployability – command builder

- Define and update command **names**, **placements**, **ordering**, and **handlers**
- **Search** for commands or **navigate** by their toolbar placement
- Manages updates as **deltas** that can be reapplied after patches and upgrades



Create Command 4.2

Create Command, Define Panel Contents & Manage Toolbar

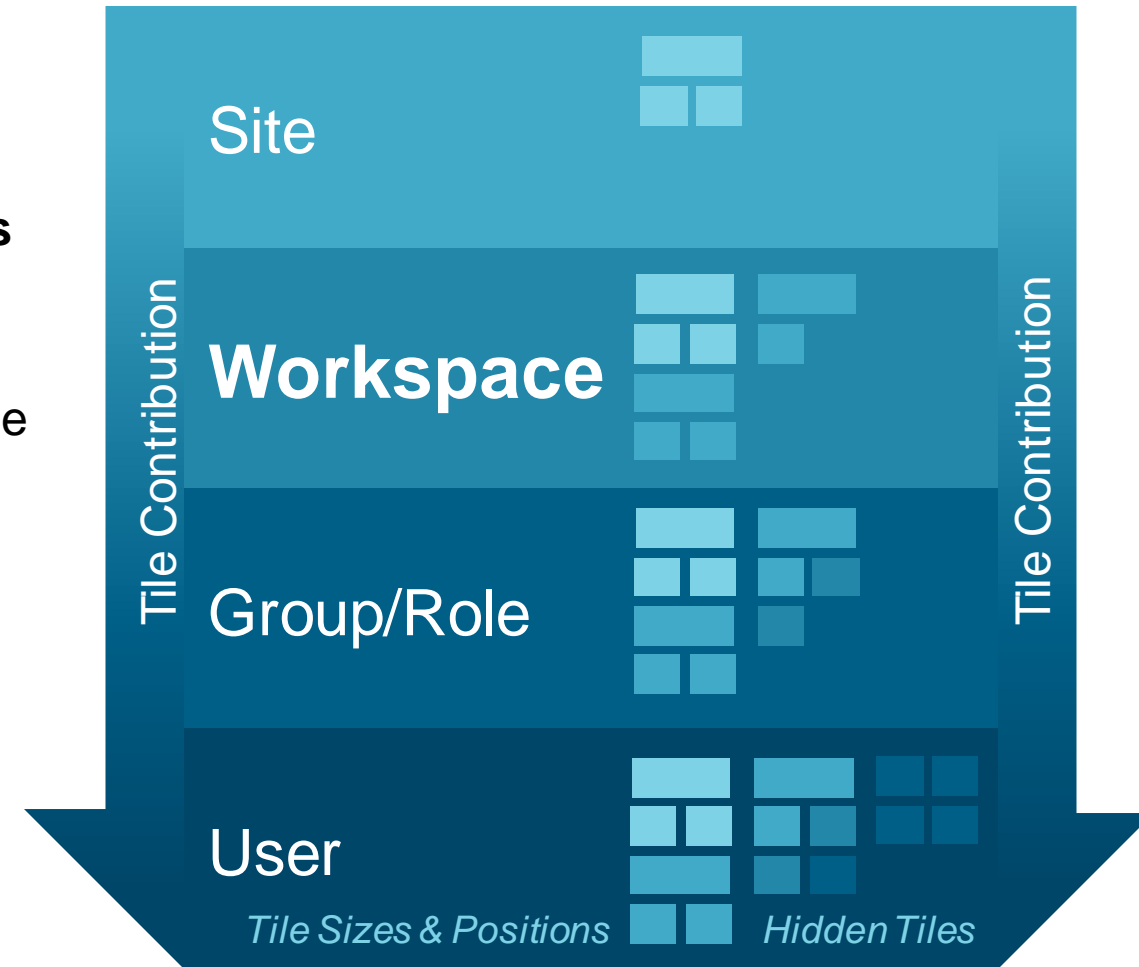


Active Workspace 4.1

Framework extensibility – home page tiles per workspace

Configure home page tiles based on workspaces

- As with prior releases tiles defined at higher levels in the scope are **added to the user's tile collection**, and **users can override sizes and positions** as well as **hide** tiles
- All previously **out-of-the-box site tiles** have **moved** to the **default workspace** tile collection
- Introduced a **new Active Admin workspace** with unique tiles designed for Teamcenter administrators
- Customers should **create their own workspaces** and not necessarily use the default workspace
- Switching Workspaces will result in a **tailored home page**



Active Workspace 4.2

Deployability – workspace best practices

Workspace Content	Default	Active Admin	Custom
Usage	For testing and production use where no configuration is desired	For administrators in production environment	For your choice of role or task in production environment
Type	Inclusive	Exclusive	Exclusive
Commands (New in 4.2)	Includes all	Only those needed for administrative tasks	Your choice
Home Tiles	Most out-of-the-box tiles are placed here except active admin tiles	Only administrative tiles	Your choice
Pages	Most out-of-the-box pages are placed here except active admin pages	Only administrative pages	Your choice
Object Stylesheets	No out-of-the-box overrides	No out-of-the-box overrides	Your choice of overrides for a specific task or role
Login page	Home page	Home page	Your choice
Columns	No out-of-the-box overrides	No out-of-the-box overrides	Your choice of overrides for a specific task or role

Active Workspace 4.1

Framework extensibility – inclusive and exclusive workspaces

Easily include all pages from a kit while defining a Workspace

- You can continue to specify individual pages that can be navigated to while in a workspace
- You now have the option to specify **all pages in a kit** that can be navigated to while in a workspace
- You can still add other individual pages from other kits even when using the all pages in a kit option

```
{  
  "schemaVersion" : "1.0.0",  
  "workspaceId": "sampleWorkspace",  
  "workspaceName": "sampleWorkspace",  
  "workspaceType": "Exclusive",  
  "defaultPage": "marsPage",  
  "availablePages": [  
    "kit::kit1",  
    "mainPage",  
    "goCategory"  
  ],  
  "availableNavigations": ,  
  "availableContextConfigurations": [  
    "projectContext",  
    "userContext",  
    "groupRoleContext"  
  ]  
}
```

Workspace
needs to be
Exclusive

All pages from Kit1

Individual pages
from other kits

Active Workspace 4.2

Deployability – commands available in workspaces

Limit what commands are available in a workspace to those required for that task or user role

- Specify to either **include specific commands** only or to **exclude specific commands**
- Excluded commands will **override** included commands
- **Include** or **exclude** all commands from a **kit** with one entry
- Applies only to **exclusive** workspaces – inclusive workspaces include all commands

New tags in workspace definition to include or exclude commands

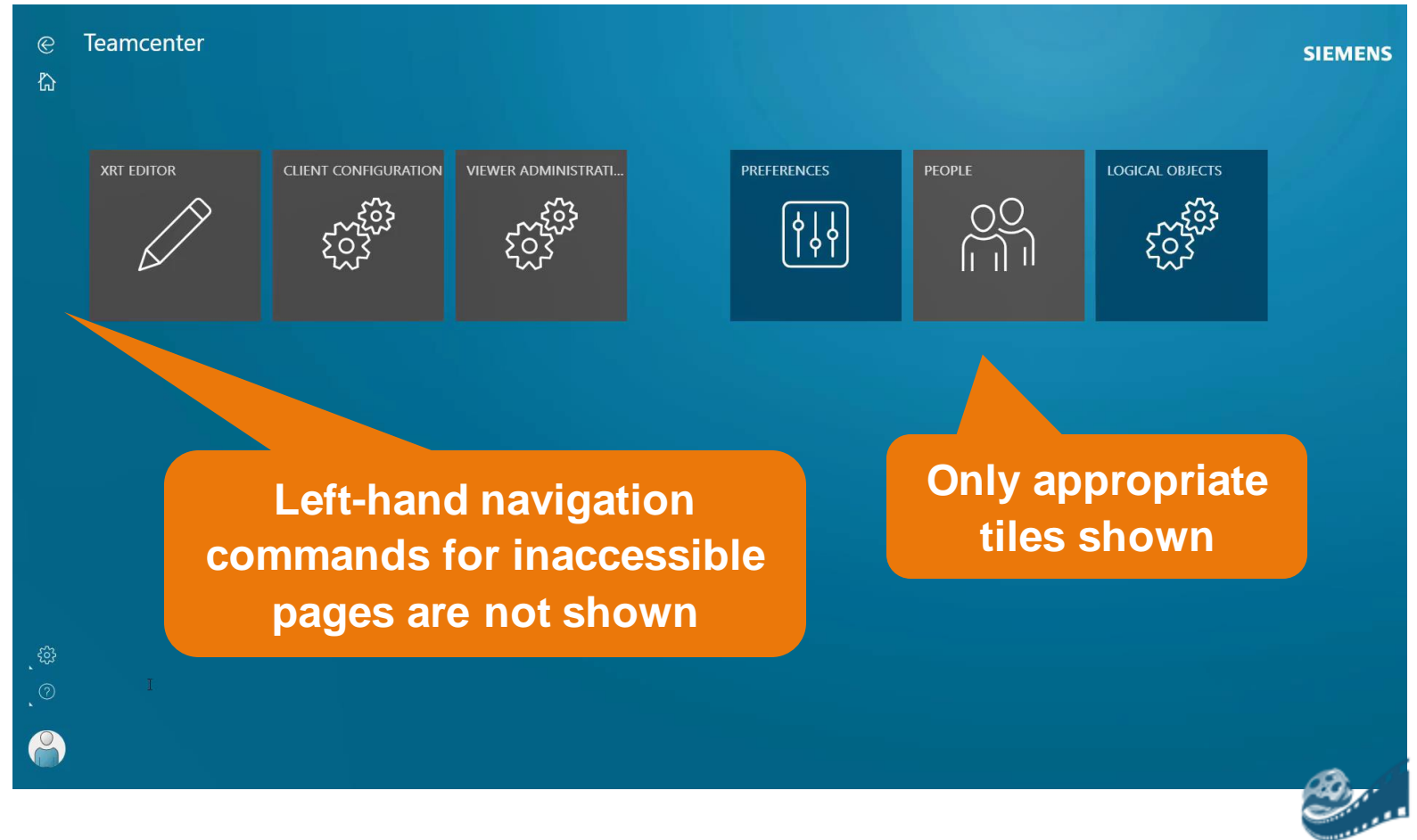
```
"includedCommands": [  
  "Awp0GoHome",  
  "Awp0ShowHomeFolder",  
  "cmdSignOut",  
  "cmdViewProfile",  
  "kit::workflow"  
]  
  
"excludedCommands": [  
  "kit::change",  
  "Awp0Print"  
]
```

Active Workspace 4.2

Deployability – workspaces out-of-the-box example

Active Admin is an out-of-the-box workspace assigned to the dba group

- Limits **home page tiles** and **pages** to those needed by an administrator
- New in Active Workspace 4.2, leverages command visibility to **only show appropriate commands** for administrators





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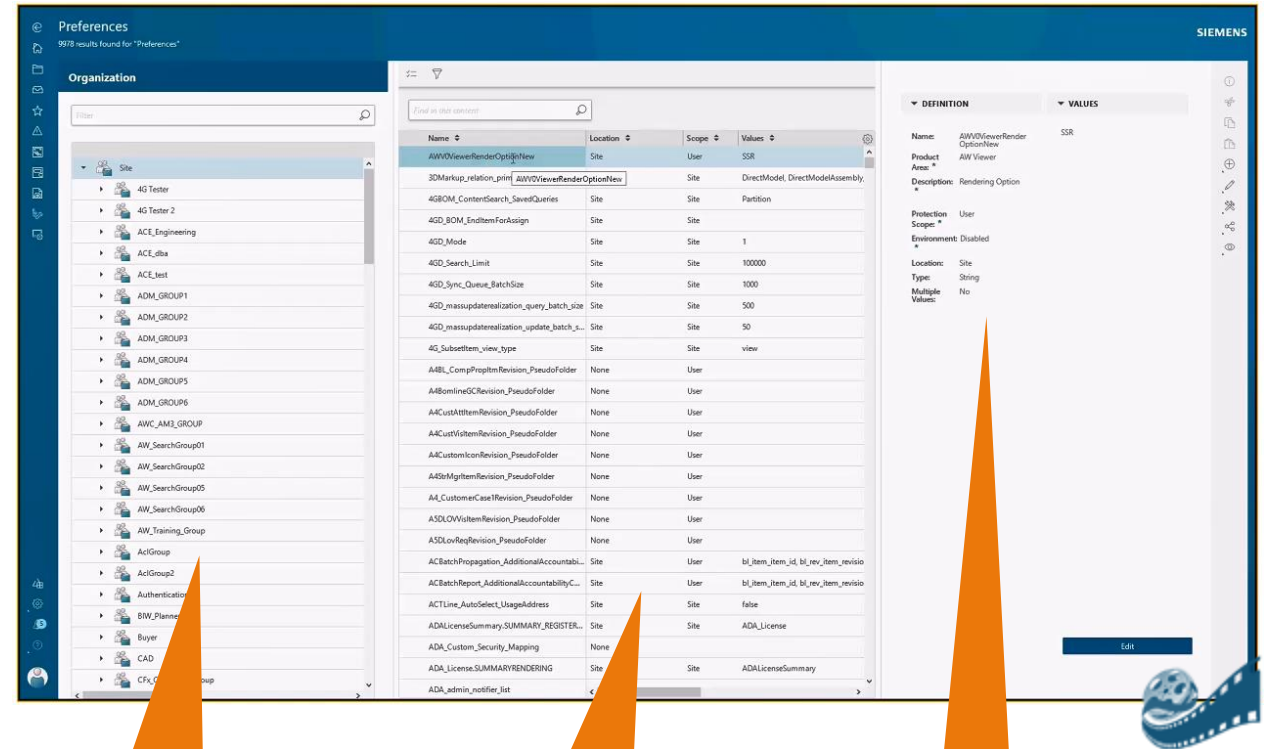
Active Workspace 4.2

PLM deployability – active administration – preference manager



Manage preferences for the entire organization

- **Navigate organization tree** and select any group, role, or user to view and edit their preferences
 - Not shown for non-dba users
 - Shown expanded to group level by default
 - Filter by group, role, user
- **View both definition and values** in summary
- **Edit and save** values in summary panel
- **Override** a preference at a group or role
- **Delete** preference definition (deletes the preference including overrides at all levels)
- **Filter** preferences by location and product area
- **Import/export** preferences



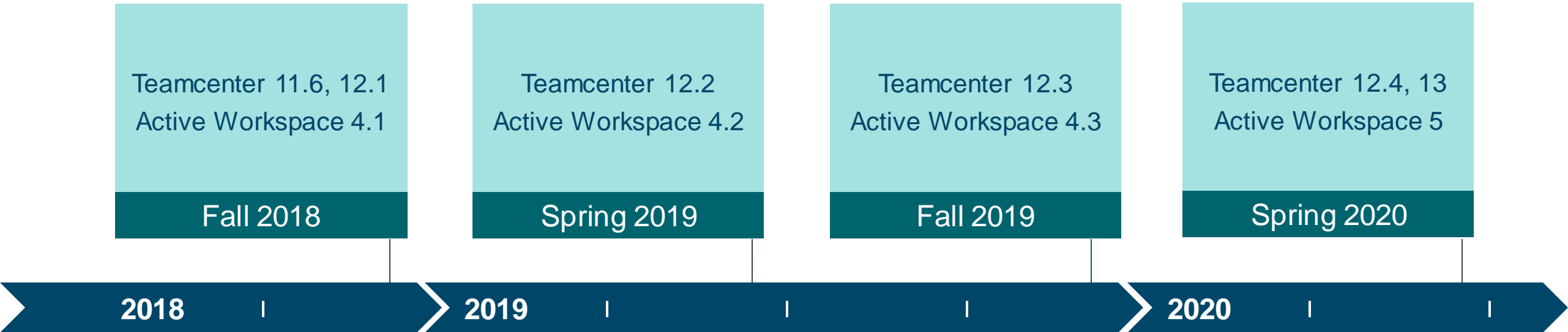
Organization
tree

Preferences
Table

Summary
Panel

Targeted Release Schedule

Release Cadence



Active Workspace Release Alignment



Upgrade Active Workspace w/o upgrading the platform release...

- When deployed with the “**minimum version**” of the platform (or any version other than the corresponding “full featured” version)
- **Contains any client updates** and extensions
- **Will not expose new platform features** or where public APIs were not available in that version
- For specific feature requirements refer to this deck or the [minimum version matrix on GTAC](#)

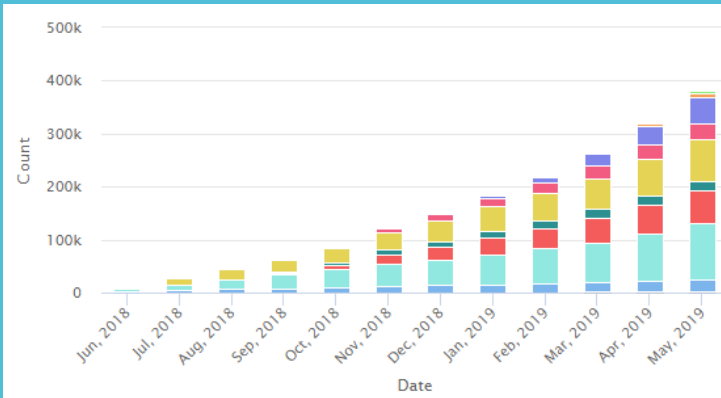
Version	Date	Teamcenter <i>Prior Release</i>		Teamcenter <i>Current Release</i>	
		<i>Minimum Version</i>	<i>Full Featured</i>	<i>Minimum Version</i>	<i>Full Featured</i>
3.3	Spring 2017	10.1.5	10.1.7 ¹	11.2.1	11.3
3.4	Fall 2017	10.1.5	10.1.7 ¹	11.2.1	11.4
4.0	Spring 2018	11.2.3	11.5	12.0	12.0
4.1	Fall 2018	11.3	11.6	12.0	12.1
4.2	Spring 2019	11.4	11.6²	12.0	12.2
4.3	Fall 2019	11.5	11.6 ²	12.0	12.3
5.0	Spring 2020	12.1	12.4	13.0	13.0
5.1	Fall 2020	12.2	12.4 ³	13.0	13.1

¹ Full featured up to 3.2 level only

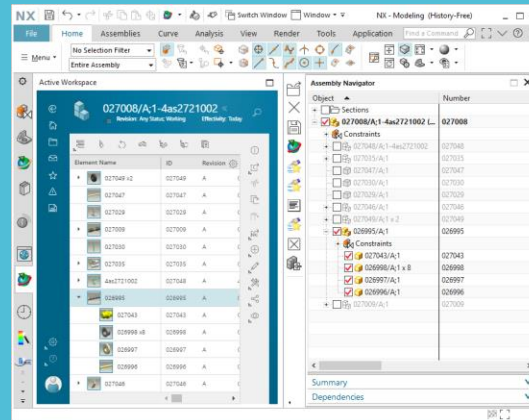
² Full featured up to the 4.1 level only

³ Full featured up to the 5.0 level only

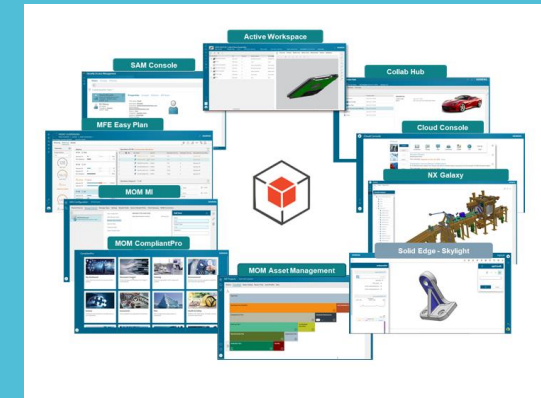
Trends and Maturity



Hundreds of thousands of active users and accelerating every month as customers go live



Over 20 integrations to rich authoring tools (e.g. CAD, Microsoft Office, Adobe, Simulation)



Siemens Web Framework has been extracted and reused across other areas by a growing family of applications

The future of Active
Workspace is
unprecedented
flexibility and lower
TCO through low-code
configuration

We need your help to
achieve this vision

Helpful Links:

Cloud Environments:

https://sales.industrysoftware.automation.siemens.com/ext/incoming/Active_Workspace_Cloud_Deployment_Demo_Logins-2.pdf

Product Page:

<https://sales.industrysoftware.automation.siemens.com/sell/teamcenter/products/active-workspace/>

Invite your Customer to the Early Customer Involvement Program:

<https://sales.industrysoftware.automation.siemens.com/accesscount/42278/Active-Workspace-ECI-Program-Overview-Customer-Facing>