- Feature: TBS-4670: Problems and Suggestions panel now has a setting to specify the maximum number of violations that will be returned.
- Feature: TBS-3118: SPARQL Query panel now has a cancel button for long-running queries.

The SPARQL Query Management config setting is no longer needed for queries issued against the SPARQL endpoint.

- Feature: TBS-4674: Create Relationship dialog now has an option to also create an inverse (once sh:class has been selected).
- Feature: TBS-4655: Forms of object properties now display any inverse property shapes.
- Feature: TBS-4194: Workflow templates now support a property teamwork:requiredGovernanceRoleOnCreate that can be used to limit

which groups of users can create new workflows using the template.

- Feature: TBS-3990: Added Edited Assets panel to display all resources that have been edited in the current workflow,

and details about what has changed for each.

- Feature: TBS-3990: Added 'Run Problems and Suggestions report' batch operation to run the report on the selected assets only.
- Feature: TBS-4711: Download link for Workflow templates now does a proper download, with proper file name and base URI.

- Feature: TBS-4094: Workflow templates can now report constraint violations and block editing for certain resources that may not be edited, see teamwork:editableInWorkflowScript.
- Feature: TBS-2954: Many convenience methods added to ADS API, see NamedNode.objects() and class GraphNodeArray as starting points.

Note: the additional functions at NamedNode may conflict with ontologygenerated APIs if they relied on

fields with these names: objects, subjects, hasObject, hasSubject.

- Feature: TBS-4752: Added IO.parseRDF() to ADS API.
- Feature: TBS-4790: Various layout and content improvements to workflow pages.
- Feature: TBS-4184: Added API function tbs:validateWorkflow and workflow transition attribute teamwork:blockOnValidationSeverity

which can be used to prevent transitions when the validation of the edited assets fails.

- Feature: TBS-4113: Transition history page now also shows the votes on transitions that entered OpenForVoting status.
- Feature: TBS-4244: Workflow templates overview now clarifies what user roles are allowed to vote.
- Feature: TBS-4446: Added ADS functions dataset.createTempGraph, graph.construct and graph.addTriples.
- Feature: TBS-3183: Added email server config parameter "Send workflow status change emails" that will activate a rule that will

send emails after workflow status transitions to all users with permissions to advance the workflow further (except for admin and power users).

- Feature: TBS-4817: Added SPARQL function smf:isSystemGraph.
- Feature: TBS-4813: New admin page showing currently occupied license seats
- Feature: TBS-4822: Admins can kill active sessions on the Concurrent Users page
- Feature: TBS-4850: Added global GraphQL config option to ignore browser's language tags in searches.
- Feature: TBS-4705: Added a global configuration option to enable Search the EDG for all asset collections.
- Feature: TBS-4726: Defines Sub Navigation for project pages.

Adds navigation breadcrumbs.

Moves Asset Collection and Workflow title to sub navigation.

Moves favorite project toggle to sub navigation.

Moves file, home, layout, lanel and misc buttons from the header to the Sub Navigation.

Adds Asset Collection status to the sub navigation.

- Improvement: TBS-4731: Diff viewer on Files page now clarifies which side is which.
- Improvement: TBS-4536: Adding missing acronyms and descriptions to EDG Classes.
- Improvement: TBS-4742: Upgrade Tika to version 1.28.1 to address CVE-2022-23596.
- Improvement: TBS-4685: Better listing of new graphs after importing TriG or Zip file.

- Improvement: TBS-4589: Replaced the term "working copy" with "workflow" within the visible user interface (except APIs).
- Improvement: TBS-4754: ADS Excel file importer is now more tolerant against malformed spreadsheets with invalid datatype literals.
- Improvement: TBS-4748: Importing multiple asset collections from zip now ignores .hidden files and reports better errors when parsing fails.
- Improvement: TBS-4768: OWL 2 SHACL converter now also handles rdfs:ranges with an owl:unionOf (currently only for length 2 and 3).
- Improvement: TBS-4780: spif:generateUUID now only generates strings starting with a letter. This avoids local names starting with

digits that didn't work well with the qname abbreviation algorithm used to display IDs in TopBraid, Turtle etc.

- Improvement: TBS-4791: sh:in now shows up on the form of property shapes, at least as a read-only field.
- Improvement: TBS-4798: The form editors for SWP elements (ui:prototype) and ADS scripts (dash:js) now open in full-screen mode when

opened by a click on the property name on the form (and it's the only property being edited).

- Improvement: TBS-4806: OpenAPI/Swagger now display better service summaries, derived from first sentence of rdfs:comment instead of rdfs:label.
- Improvement: TBS-4341: ADS node.js performance improvement of qname/localName/nameSpace algorithms.

- Improvement: TBS-4727: Search Panel layout has been refined for an improved user experience.
- Improvement: TBS-4698: Replace node-sass which has been deprecated with dart-sass.
- Improvement: TBS-4856: In the ADS API, sh\_NodeShape.properties now returns sh\_PropertyShape[].
- Improvement: TBS-4852: 'add column' action moved to react table
- Improvement: TBS-4628: Rewrite of backup and restore
- Improvement: TBS-4536: Updated QUDT to release 2.1.18.
- Improvement: TBS-4728: Manage search filter within a modal
- Improvement: TBS-4893: Moved Miller Column Dialog into a flyout
- Improvement: TBS-4943: File Save button now display a confirmation dialog if the file on disk is newer than the last save time stamp.
- Improvement: TBS-4942: The file editor will display a warning dialog if the user navigates away with unsaved changes.
- Improvement: TBS-4957: SPARQL endpoint now also supports response type application/n-triples.
- Improvement: TBS-4818: Icons added to the search the edg result drop down menu
- Improvement: TBS-4906: Re-wording of graphQL missing public class message

- Improvement: TBS-4849: In Studio/ADS, outdated API warnings are now only printed on the first incident.
- Improvement: TBS-4750: Adjust multi-search input placement to even out white space above and below.
- Improvement: TBS-5005: Enumerations panel will now match to all other search panels
- Improvement: TBS-4664: If an asset collection is included into the Governance Model, all roles will be given viewer permission to it and its imports.
- Improvement: TBS-4983: Relocate New button in header next to Collections menu.
- Improvement: TBS-5016: Table viewers such as dash: ValueTableViewer now render rdf: HTML literals as embedded HTML.
- Improvement: TBS-4846: Better error handling for a failure when publishing to Explorer/Sending projects to another server.
- Change: Upgraded GraalVM to version 22.0.0 (which includes support for ECMAScript 2022).
- Change: Upgraded Monaco Editor to version 0.32.1
- Change: TBS-4759: The (experimental) API features introduced with 7.2 have been promoted to API status "stable".
- Change: TBS-4649: Users that are neither admins nor power users can no longer run SPARQL queries that iterate over all graphs using

the GRAPH clause with an unbound variable. A new server config parameter can be used to block this even for

admins and power users, which is useful especially during development and testing. - Change: TBS-4714: Updated graphiql to version 1.8.2. - Change: Upgraded GraalVM to version 22.0.0 (which includes support for ECMAScript 2022). - Change: Upgraded Monaco Editor to version 0.32.1 - Change: TBS-4793: The properties table on class/node shape forms no longer supports drag and drop but right-click context menu. - Change: TBS-4743: Upgrade Apache Tika to 2.3.0. EDG now only includes the Tika standard parser package, and support for some file formats has been lost from Corpus import. - Change: TBS-4817: OWL to SHACL converter page no longer automatically includes transitive owl:imports of the selected subgraphs. Select them explicitly if you like to include them. - Change: TBS-3938: Settings from the editor are now saved per asset collection and shared for all workflows of that asset collection. - Change: TBS-4698: Updates fontawesome-free to fontawesome-free v6. - Change: TBS-4839: More GraphQL mutation uri fields can now parse gnames instead of the full URI. - Change: TBS-4911: In create dialogs, (and) characters entered in labels will be skipped

for the generation of local names.

- Change: TBS-4953: SPARQL Query panel now queries all included graphs by default, use 'Return local results only' for old behaviour.
- Change: TBS-5004: Governance in the Collections menu now links to Governace Areas tab.
- Change: TBS-5004: Governance in the Collections menu now links to Governace Areas tab.
- Bug fix: TBS-4195: Default workflow template selection now picks another template if teamwork:DefaultTagWorkflowTemplate does not exist.
- Bug fix: TBS-4746: Change History panel did not correctly show the added/deleted counts.
- Bug fix: TBS-4751: ADS graph.contains now matches JS plain numbers to both xsd:integer and xsd:decimal (where applicable).
- Bug fix: TBS-4757: dash:TextFieldEditor and dash:TextAreaEditor were incorrectly allowed to edit rdf:langString values.
- Bug fix: TBS-4761: The arguments of tbs/exportRDFFile service were ignored when called as POST request.
- Bug fix: TBS-4770: GraphQL engine did not correctly handle where...contains on inferred (sh:values) properties.
- Bug fix: TBS-4772: GraphQL engine sometimes did not work with where...startsWith.
- Bug fix: TBS-4715: Some dates for Tasks were not using a using a localized format.

- Bug fix: TBS-4721: Use consistent messaging for admin and non-admin users when a term license expires.
- Bug fix: TBS-4773: The constraints that classes, properties and shapes cannot be declared in non-Ontology graphs was not always triggered correctly.
- Bug fix: TBS-4771: Fixed a problem running multiple named queries in GraphiQL interface.
- Bug fix: TBS-4774: GraphQL servlet's async flag did not work as advertised.
- Bug fix: TBS-4787: For edg:DataValueRules, the values of datatypes would sometimes disappear from the form view.
- Bug fix: TBS-4812: Fix possible NPE when logging out with an API client
- Bug fix: TBS-4737: Fixed layout regression with tabular script results viewer.
- Bug fix: TBS-4836: Fix regression where SPARQL DESCRIBE queries would return no results.
- Bug fix: TBS-4837: Removing the "Allow Anonymous Access" setting from Server Configuration would only take effect after restart
- Bug fix: TBS-4813: Fix "anonymous" user occupying a license seat in certain circumstances
- Bug fix: Missing styled error page when concurrent user limit exceeded on EDG Studio
- Bug fix: TBS-4845: The Undo button was broken from workflows.

- Bug fix: TBS-4825: Disabled cross domain request for YATE and YASQE
- Bug fix: TBS-4724: Change History Panel resizing issue
- Bug fix: TBS-4851: Search Panel: filtering on nested columns does not work
- Bug fix: TBS-4911: Create property dialog did not create global OWL properties if the property path was not a qname.
- Bug Fix: Permissible Value Properties should more reliably show labels instead of URIs.
- Bug fix: TBS-4871: Added scroll bar in panels menu
- Bug fix: TBS-4907: For sh:SPARQLFunctions, the form editor would sometimes save sh:ask even if only sh:select was edited.
- Bug fix: TBS-4949: Transform > Delete Sample Data sometimes hung.
- Bug fix: TBS-4904: Fix problem with dupicate URIs that exist in multiple graphs in Search the EDG results.
- Bug fix: TBS-4719: Sparql Panel set to read only when user has no edit access
- Bug fix: TBS-4931: Fix problem SSL authentication using sml:PostRequest
- Bug Fix: TBS-4928: Fixed Basic Auth not working with IO.http() function of ADS API
- Bug fix: TBS-4872: Fixes retrieving public keys for verifying OAuth tokens from Okta.

- Bug fix: TBS-4889: Fixes an issue recognizing user-defined governance roles.
- Bug fix: TBS-4968: Cloning an asset collection did not clone certain references such as sh:prefixes ?projectGraph.
- Bug fix: TBS-4916: Fixed handling of dates with a 'Z' (UTC) time zone.
- Bug fix: TBS-4924: Allow only POST requests to the SAML assertion consumer service.
- Deleted: TBS-4486: Legacy graph http://topbraid.org/imported (imported.ttl) and two related SPARQL functions have been deleted.
- Deleted: TBS-4708: Removed jqgrid and datatables javascript libraries. Their usage had previously been deprecated.
- Deleted: TBS-4487: Remove remnants of deleted legacy EVN Explorer
- Deleted: TBS-4536: removed QUDT release 1 files. They can be found on the web at http://linkedmodel.org/catalog/qudt/1.1/
- Deleted: TBS-4848: Removed some dead code for an error condition that can no longer occur.
- Change: TBS-4929: Several places related to Secure Storage now require separate arguments for 'user' and

'resource' instead of a concatenated 'user@resource' argument. This affects the APIs

tbl/credentialHandler, pwadmin:HasExistingCredentialsService and pwadmin:RemoveSecureStoragePasswordService,

the SWP elements pwadmin:removeSecureStoragePassword and swa:updateSecureStorage, and the SPARQL function

smf:hasPassword.