

inubit

BPM

## **Feature List**

Version 7.3

Bosch Software Innovations



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# 1 General

## 1.1 Backup, Restore

Process data exported from inubit 7.x can be imported to newer inubit versions.

## 1.2 Enterprise Portal

- Ext JS has been updated to version 6.2.5.
- Ext JS 6.2.1 is supported.
- All widgets support both Ext JS 4 and Ext JS 6 for web applications or task-based applications.
- Ext JS 6 supports internationalization using the i18n package.
- The XStream library has been updated to version 1.4.10.

## 1.3 Installer

- The inubit JRE 1.8.0\_144 package includes Bouncy Castle 1.58.
- inubit includes Java version 1.8.0\_152.

## 1.4 Licensing

The `xml-security.jar` file version 2.0.8 is used.

## 1.5 Liferay

- Ext JS has been updated to version 6.2.5.
- The Liferay inubit web services are converted to OSGI modules.
- All Ext JS 6 resources are delivered.
- Liferay plugin has been updated.

## 1.6 Monitoring

- Encryption of the log database connections for Oracle has been enabled.
- A retry mechanism prevents blocking when accessing an MSSQL-based inubit Monitoring database.

## 1.7 Server

- In the directory `<inubit-installdir>/server/ibis_root/conf`, the templates for MariaDB are available. They can be used to configure MariaDB for inubit as database for Cache, Repository and Monitoring.
- Infinispan has been updated to 8.2.5.
- By setting the option `Ignore user-defined columns`, refreshing the Queue Managers can be accelerated.
- Tomcat has been upgraded to 8.0.47.

## 2 Process Engine

### 2.1 Command Line Interface (CLI)

- The option `--includeHistory` has been added. Workflow functionality can be exported in CLI to retrieve version history of all diagrams and modules that are being exported.
- The options `export --exportModule` and `import --importModule` have been added. Modules can be exported/imported from/to the workbench using CLI.

### 2.2 REST Interface

- LDAP authentication searches the entire tree structure so that LDAP users can be placed in lower hierarchy levels.
- The internal server error messages that appear when the server trace level Debug is activated have been revised.
- The license check for the REST Interface has been removed. The user can use the REST Interface without license entry.

## 3 Workbench

### 3.1 Workbench - General

- On the Designer tab, Module Editor tab, Repository tab, and Reporting tab, the entire user group hierarchy can be displayed in additional user group.
- A global search function has been added to the Workbench. Logical combinations of search criteria are possible by using search operators.
- For the error branch, the module property `ErrorSuppression` can be set using the variables mapping to override the error suppression checkbox configured in the wizard at runtime.
- The hints when editing field contents have been improved and the behavior has been standardized.
- Several module wizards can be opened at the same time while the navigation bar of the Workbench can be operated.
- The administrator is able to edit the last used EDI ID via the EDI ID editor.
- An option to refresh the Designer tab automatically in an interval has been added.
- In Reports, colors can be defined for certain criteria/values.
- After selecting a new process user server from the drop down menu, the property view changes immediately.

### 3.2 Designer

#### 3.2.1 Designer - General

- Non-displayed words within a text that is too long for the holistic presentation are represented by three dots.
- After generating a Technical Workflow from a Business Process Diagram frames and comments for BPD elements are provided as groups or text annotations.
- After renaming the target element the metadata link is updated in both the Configuration tab and in the assigned modules.

#### 3.2.2 Process Maps

If two Process Maps are linked together, the link to the other is displayed in both.

#### 3.2.3 Business Object Diagrams

Nested structures are supported to map more complex structures in the Business Object Diagram.

#### 3.2.4 Organization Diagrams

The added actual name of a portal user will also be considered as a mapping constraint to display the tasks in the portal.

#### 3.2.5 System Diagrams

External system configurations are retained when a diagram is published even if the external system is not linked.

#### 3.2.6 Technical Workflows

Modules and parts of a Technical Workflow can be copied from the server view of the Designer.

### 3.3 Module Editor

Modules can be added as favorites. The modules are then available from the Favorite directories list within a workflow clearly arranged.

## 3.4 Editors

### 3.4.1 XPath Assistant

- In the XPath field, the auto complete functionality supports XML files.
- The default namespace does not need to be specified for the appropriate functions to be proposed in the XPath field after at least one character has been entered.
- The `errorKey` parameter provided by the XPath extension function `misc :throwInubitException(errorKey, ErrorText)` can be used as a condition for a Scope error branch.
- A standard variable with an input message as content is provided so that the content can be accessed by XPath execution.

## 3.5 Deployment, Import, Export

- If a workflow is exported, renamed, and imported again, the repository object corresponding to its unit test is newly created.
- When deploying diagrams, the content of variables of the type `password` is not displayed.
- A CLI command to validate the runtime data export ZIP has been added.
- More than one deployment at the same time with same user can be executed.
- During the deployment of repository content a progress bar is displayed even after the time-out set for Workbench connection has exceeded.
- During the import of a Workflow diagram or module the user has the opportunity to leave a comment.
- A selection feature for deploying/exporting all diagrams linked with a particular Technical Workflow has been added.
- A plausibility check for 7.1 and 7.2 process export archives is provided.

## 3.6 Monitoring

- User defined columns are displayed in the Monitoring tab when they are configured.
- The filter criteria of the Action column in the Audit Log tab can be sorted.
- A system administrator is able to define filter criteria for users in the Queue Manager.
- Configured schedulers of deactivated workflows and modules are displayed in the Scheduler Manager tab.

## 3.7 Process Viewer

Link target icons are displayed in Process Viewer.

## 3.8 Unit Tests

Unit Test files can be stored in separate directories.



## 4 Modules and System Connectors

### 4.1 Data Converters

#### 4.1.1 Complex Lookup/Lookup Table

- In the Lookup-/Complex Lookup Table, table synonyms and aliases are displayed.
- The first data source of a Complex Lookup Table can be overwritten via System Diagram.

#### 4.1.2 FO Converter

- FOP application has been updated to version 2.2.
- FOP 0.20.5 is no longer supported in inubit.

#### 4.1.3 Task Generator

The cache key creation logic has been improved to reduce the length of the timeout key.

#### 4.1.4 XSLT Converter

The XStream library has been updated to version 1.4.10.

### 4.2 Format Adapters

#### 4.2.1 EDI Adapter

- Rules for varying the length of the segment name within the EDI Adapter can be defined.
- For the XML-EDI Adapter the auto detection functionality supports functional groups.
- Optionally, the Functional Group Header (UNG) and Trailer (UNE) can be created when generating a template or an XML schema.

#### 4.2.2 JSON Adapter

The Jackson Databind library has been upgraded to version 2.8.9.

#### 4.2.3 XLSX Adapter

Apache POI library has been updated to support MS Excel 2016 in XLS Adapter.

### 4.3 System Connectors

#### 4.3.1 AS2 Connector

- Details of an input message are saved and displayed as Workflow variables.
- The following algorithms are supported.
  - Hashing Algorithm
    - SHA 256
    - SHA 512
  - Signature Algorithm
    - RSASSA-PSS
    - RSASSA-PKCS1-v1\_5
  - Key Encryption Algorithm
    - RSAES-OAEP
    - RSAES-PKCS1-v1\_5
- The input message is checked for different JavaMail versions.

### 4.3.2 AS4 Connector

The integrated documentation of the AS4 CPA repository file has been extended.

### 4.3.3 Database Connector

- The user now can set the `queryTimeout` via the variables mapping option.
- The `jmxEnabled` property has been provided on connection pool properties to monitor DB connections using `jvisual`.
- Support of `TO_TIMESTAMP` and null value features for Oracle.
- The performance has been improved by optimizing the parsing of the used XML structure.

### 4.3.4 HTTP Connector

The HTTP Output Connector now receives error details when the Workflow called by a listener fails. The actual error message is returned.

### 4.3.5 Mail Connector

- If the Number of Mails option is selected, the messages not yet converted to MIME-XML will also be transmitted.
- Mails can be copied/moved to other mail directories.

### 4.3.6 REST Connector

After IM authentication the `im-context id` is added as new module property `restConnector.requestAuthIMContextID` as well as the `HTTPHeader set`.

### 4.3.7 RosettaNet HTTPS Connector

The input message is checked for different JavaMail versions.

### 4.3.8 SAP Connector

- An extended Transaction Scope support has been added.
- The XStream library has been updated to version 1.4.10.

### 4.3.9 VFS Connector

- Smb 2.0 and smb 2.1 are supported.
- DFS server connections are supported.

### 4.3.10 VR Execution Connector

- The `xercesImpl-2.11.0.SP5.jar` library is used in order to fix the vulnerability found in the IQ scan.
- inubit requests to a Visual Rules server support the JSON format to support Visual Rules 7.0.

### 4.3.11 Web Services Connector

- The `xercesImpl-2.11.0.SP5.jar` library is used in order to fix the vulnerability found in the IQ scan.
- Authentication works even if WSRM is enabled.
- In the WSDL editor, the search function has been improved.
- The input message is checked for different JavaMail versions.

### 4.3.12 WebDAV Connector

- HTTP response headers and the possibility to enable HTTP redirection have been implemented.
- When files are saved to the Repository, the anonymous read permissions can be set.

## 4.4 Utilities

### 4.4.1 Certificate Reader

New certificate information is provided.

### 4.4.2 Compressor

- ZIP archives can be secured by a password when being encrypted/decrypted.
- A password function to safely compress ZIP archives has been added.
- Compression and decompression in/from 7-Zip format is supported for the following operating systems:
  - Ubuntu 14LTS
  - Ubuntu 16.04.2LTS
  - CentOS 7
  - Mac X86\_64
  - Windows amd64
  - Windows x86

### 4.4.3 Cryptographer

Module properties have been extended to support AES encryption.

### 4.4.4 PDF Toolbox

The PDF Toolbox has been updated to version 7.0.2 to support patterns for pictures.

### 4.4.5 Process Data Logger

Quoted tables and column names are supported within the Process Data Logger.

### 4.4.6 S/MIME

Input Connector: New Workflow variables contain information about whether the message was encrypted/signed or not, whether the key was encrypted or not, and about the algorithm used to encrypt/sign the message or encrypt the key.

The following algorithms are supported:

- Signature Algorithm
  - RSASSA-PSS
  - RSASSA-PKCS1-v1\_5
- Key Encryption Algorithm
  - RSAES-OAEP
  - RSAES-PKCS1-v1\_5

### 4.4.7 XML Diff

- The XMLUnit library can be used to compare XML files.
- Options to select the existing compare mechanism have been added.
- Options to highlight and see the difference in the result watch point file have been added.
- Comparing diagrams has been improved.

## 4.5 Workflow Controls

### 4.5.1 Wait

A process in state **Waiting** can be started manually.

Your feedback helps us to continuously improve our products and components. Please send any questions, comments or suggestions for improvement to [support@bosch-si.com](mailto:support@bosch-si.com).

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