

# MELIM

## IPsoft's Cognitive Agent

## Conductor 3.7.13 Release Notes (Document version 1.0)



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### **Document History**

Author	Version	Date	Comments	Final Approval?
IPsoft Research & Development	1.0	April 22, 2022	Added bug fixes and new functionality for 3.7.1 through 3.7.13 releases of the Conductor tool	Yes



## 1. List of All Changes

This section provides a detailed list of all new features and bug fixes.

#### 1.1 RELEASE 3.7.1

This release version was not used.

#### 1.2 **RELEASE 3.7.2**

This release version was not used.

#### 1.3 **RELEASE 3.7.3**

#### 1.3.1 Bug Fixes (3.7.3)

- Quit/exit command does not work after running commands that use the Java SDK (AM3-13122)
- Exporting from a domain with 0 grammars, intents, or entities should not write a binary file (AM3-13123)
- Not properly creating path to the grammar XML file (AM3-13132)
- Escalation queue export uses wrong method (AM3-13528)
- User group import does not specify target domain (AM3-13529)

#### 1.3.2 New Features (3.7.3)

- Add ability to search and export based on user attributes (AM3-13293)
- Add NLU settings import and export commands (AM3-13311)

#### 1.4 **RELEASE 3.7.4**

#### 1.4.1 Bug Fixes (3.7.4)

• Java SDK exports more training documents than visible in a domain (AM3-13241)



#### 1.5 **RELEASE 3.7.5**

#### 1.5.1 Bug Fixes (3.7.5)

Fix issues related to import and export commands in Amelia V3 and V4 (AM3-13697)

#### 1.6 RELEASE 3.7.6

#### 1.6.1 Bug Fixes (3.7.6)

- Error while importing training document with same name (AM3-13714)
- Handle exception while creating response pool (AM3-13716)
- Failed to import NLU settings (AM3-13711)

#### 1.7 **RELEASE 3.7.7**

#### 1.7.1 Bug Fixes (3.7.7)

- Export and import classifier models depending on revision target (AM3-13722)
- Add error handling in BPN import when no BPN is present in source instance (AM3-13727)
- Remove logic for creating 1Desk/1RPA/1Store instances (AM3-13729)
- Exception while creating Amelia User in domain import (AM3-13730)
- Move conductor-common into conductor-engine-common (AM3-13752)
- Script library has wrong links to included libraries after copying to another domain (AM3-13768)
- After every import the target fetched list not updated for most import commands (AM3-13784)

#### 1.8 **R**ELEASE **3.7.8**

#### 1.8.1 Bug Fixes (3.7.8)

• Fix import command issues in BPN, Script, and Response pool (AM3-13798)

#### 1.9 **RELEASE 3.7.9**

#### 1.9.1 Bug Fixes (3.7.9)

- Refactor engine-common code to remove unused methods and classes (AM3--13780)
- Delete the script file if imported by another script file (AM3-13807)
- Refactor engine-cli code to remove unused methods and classes (AM3--13815)
- Move engine-common and common-model to engine-cli repository (AM3-13816)
- Fix empty associated roles of user group issue when importing user groups (AM3-13839)



- Fix domain export and import issues with transcript and IDs for users, escalation queues, intents, and images (AM3-13868)
- Fix Divide by 0 error importing integrations into Amelia V4 (AM3-13875)
- Fix invalid command message while importing training documents (AM3-13879)
- Fix user list not exported during import (AM3-13892)
- Fix domain migration File not Found issues (AM3-13898)
- Fix Domain import errors with users, BPNs, escalation queues (AM3-13904)
- Script Library folder not deleted in v4.3.4 & v3.7.9 (AM3-13914)
- Fix dependent Script and Integration flow during BPN migration (AM3-13915)

#### 1.9.2 New Features (3.7.9)

- Change Gradle to Maven and add check-style (AM3-13724)
- Export and import avatar and branding image during domain export and import (AM3-13860)
- Add --bulk flag option to amelia-classifier-export and amelia-classifier-import commands (AM3-13862)
- Update SDK dependence with new release version to support updated APIs (AM3-13896)

#### 1.10 Release 3.7.10

#### 1.10.1 Bug Fixes (3.7.10)

- Fix importing Tabular data files with wrong metadata (AM3-13415)
- Handle resource file not found for Multimedia migration (AM3-13927)
- Write only failed validation in bpn validation export during import and export (AM3-13937)
- Incorrect log in Tabular clean and configure logback/shell-log files (AM3-13955)

#### 1.10.2 New Features (3.7.10)

- Handle workflow, response-pool and intent dependency during BPN migration (AM3-13925)
- Update parent domain resources in child domains (AM3-13945)
- Support referenced parent domain assets & scripts in child domain (AM3-13947)
- Show warning if filter by names/id is not found during export/import (AM3-13952)

#### 1.11 RELEASE 3.7.11

#### 1.11.1 Bug Fixes (3.7.11)

- Remove restrictions on cleaning version 1 of integration flow (AM3--13962)
- Use thread pool ExecutorService for CompletableFuture async to avoid OOM error (AM3--13976)

#### 1.11.2 New Features (3.7.11)

- Add last Git commit log to manifest file when jar file is published in Artifactory (AM3-13803)
- Add --bulk flag option to amelia-entity-clean and amelia-intent-clean commands (AM3--13873)



- Add --bulk flag option to amelia-classifier-clean command to bulk delete models (AM3--13883)
- Add clean command for escalation queue/team, user, user group (AM3-13959)
- Update SDK dependence with Amelia version 3.7.62 release for latest APIs (AM3-13984)

#### 1.12 RELEASE 3.7.12

#### 1.12.1 Bug Fixes (3.7.12)

- Refactor integration deploy status check and deploy timeout code (AM3-13820)
- Recursively migrate linked Script library with --names and --ids flag options (AM3-14004)
- Make name matching case insensitive for integration property sets, tabular, user, and user role imports (AM3--14008)
- Log the Script file circular dependencies to remove before running clean command (AM3--14016)
- Fix --include-transcript and --include-escalation flag options in amelia-metrics-export command (AM3-14027)

#### 1.12.2 New Features (3.7.12)

- Add --names and --ids flag options to amelia-bpn-import command (AM3--14006)
- Add --deploy-strategy flag option to amelia-bpn-import command (AM3-14015)
- Add --import-strategy flag option to amelia-user-import command (AM3-14017)
- Add flag option descriptions to appear when invoking help <command> (AM3-14021)

#### 1.13 **RELEASE 3.7.10**

#### 1.13.1 Bug Fixes (3.7.13)

- Display warning when import fails due to empty items then start next task in script sequence (AM3-14032)
- Empty BPN parent and sub directories not deleted after clean command (AM3--14039)
- Code clean up and Maven package updates (AM3--14043)

#### 1.13.2 New Features (3.7.13)

Log all replaced encrypted values after Integration flow import and export (AM3--14034)



## 2. Glossary

This table describes common terms used in these release notes.

Table 1. Glossary of Terms

Term	Definition
AIML	Artificial Intelligence Markup Language (AIML) is an XML dialect used by natural language software agents. Elements marked up with AIML tell agents what to say in different situations and, in some cases, how to say their response.
API	Application Programming Interface is a set of subroutines, data structures, communication protocols, and other tools used to build software. An API provides the building blocks used by programmers to build software applications.
Business Process Network (BPN)	Defines process-based interactions between Amelia and a user, for example, unlocking an account or resetting a password.
Classifier Model	A data set Amelia creates with intents, entities, utterances, and other data to understand conversation used to describe a topic. Algorithms process the input data to evaluate the importance and weight of words and phrases in the data set.
CMS	Content Management System is one or more software programs used to create, manage, and publish digital content.
CQA	Clarifying Question Answer (CQA) is the ability for Amelia to determine potential confusion within utterances and ask questions to clarify the user intent in the utterance.
CSV	Comma Separated Values is a text file where row data is separated (delimited) with commas.
DNN	A Deep Neural Network (DNN) Is an artificial neural network that mimics the complex neural networks in animal and human brains. DNNs have multiple layers between input and output with each layer evaluating utterances for words and the relationships between words.
ELMo	Embeddings from Language Model (ELMo) is a Natural Language Processing (NLP) model used to evaluate utterances to determine the meaning of a single word based on words around it. For example, the word bank has different meanings in the utterances, "The bank down the street was robbed" and "We had a picnic on the bank of the river." The words robbed and river indicate the word bank has a different meaning in each sentence.
Entity	Data collected to complete an intent goal, for example, a date of birth for a loan application.
EQA	Elaborate Question Answering (EQA) involves asking dynamic follow-up questions for more information when an utterance doesn't converge on an intent.
FAQ	A list of frequently asked questions related to a specific topic.
FQT	Fully Qualified Task, a task that has been evaluated as acceptable to be processed to resolution.
HMR	Hot Module Replacement is a feature of webpack software module bundler to allow modules to be exchanged, added, or removed while a software application runs.
IdP	An identity provider (IdP) is a system entity that issues authentication assertions with one or more single sign-on (SSO) profiles using SAML (Security Assertion Markup Language).



Term	Definition
Intent	The user's goal, for example, to qualify for an auto loan. The goal requires a process to complete.
JEXL	Java Expression Language is library to provide dynamic scripting features in applications and frameworks written in the Java programming language.
JSON	JavaScript Object Notation is a text data storage standard that uses name (key):value pairs to organize data in an ordered list easily processed by many programming languages.
LDAP	The Lightweight Directory Access Protocol (LDAP) is an open cross platform protocol used for directory services authentication. LDAP is a language applications use to communicate with directory services to authenticate users.
LP	Language Pack, software that when installed provide Amelia with the ability to speak a specific language.
MIME	MIME (Multi-Purpose Internet Mail Extensions) is an extension of the original Internet e-mail protocol to let people exchange different kinds of data files on the Internet, for example, audio, video, images, application programs, and other kinds, as well as the ASCII text handled in the original protocol.
Negative Utterances	An unlabeled training utterance, negatives help Amelia learn the difference between tasks and knowledge she is trained on and things she is not. They help Amelia understand words that are similar but have different unrelated meanings than utterances used to trigger the intent goal and Amelia's processes.
NER	Named Entity Recognition is part of extracting information to locate named entity mentions in unstructured text then classify the entities into categories, for example, person names, organizations, and date/time expressions.
NLP	Natural Language Processing (NLP) mixes computer science, information engineering, and artificial intelligence to program computers to analyze and understand natural human language, the unconstructed casual way people talk.
NPE	NullPointerException is a Java RuntimeException. In Java, a special null value can be assigned to an object reference. A NullPointerException is thrown when an application attempts to use an object reference that has the null value.
PSA	The Personal Speech Act (PSA) is a classifier used to identify insults and compliments.
SAML	Security Assertion Markup Language (SAML) is an open standard used to exchange authentication and authorization data between an identity provider and a service provider. SAML is an XML-based markup language.
SDL	Software and Documentation Localization is an on-premise language translation service that provides secure automatic translation.
SpEL	Spring Express Language is a programming language that supports querying and manipulating an object graph at runtime.
SSL	Secure Sockets Layer is a security technology to establish an encrypted link between a web server and web browsers.
SSO	Single sign-on (SSO) is an authentication scheme to allow users to log in with a single ID and password to any of several related yet independent software applications. SSO passes an authentication token seamlessly to applications configured to receive and process tokens.



Term	Definition
TLS	Transport Layer Security (TLS), and its now-deprecated predecessor, Secure Sockets Layer (SSL), are cryptographic protocols designed to provide communications security over a computer network. Websites use TLS to secure all communications between their servers and web browsers.
TSV	Tab Separated Values is a text file where row data is separated (delimited) with tabs.
Utterance	Words that represent a natural language sentence, for example, "I want to reset my password." A variety of possible utterances a person might say in a conversation are used to train Amelia.