

AMELIA

Cognitive Agent

Amelia 6.4.1 Release Notes

(Document version 1.1)



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Document History

Author	Version	Date	Comments	Final Approval?
Amelia Research & Development	1.0	April 25, 2024	Added bug fixes and new functionality for 6.4.0	Yes
Amelia Research & Development	1.1	May 10, 2024	Added bug fixes and new functionality for 6.4.1	Yes

1. Highlights by Release

This document briefly lists significant changes to Amelia because of 6.4.x version releases. A detailed list of all new features and bug fixes are listed in the next section of this document.

1.1.1 Release 6.4.0

CONTROL ACCESS TO AMELIA ANSWER KNOWLEDGE SOURCES

Amelia Answers now includes the same tagging capability used in response pools. This means that you can tag knowledge sources and conversation profiles and define logic to connect them. This knowledge source segmentation is important for personalized responses. For example, you can now tailor answers based on a user's location or their role and expertise. Tags can be set at both the conversation and knowledge source level. Amelia uses four methods to match conversations to sources - Any, Exact, and All Match with Leniency as a modifier.

This new feature has many advantages. Your users are more likely to interact with a personalized Amelia Answers experience. Creators can build more use cases in an individual domain. Also, Amelia can better support enterprise-grade deployments with requirements for access and provisioning.

To apply tags to knowledge sources, go to the Properties panel in the Amelia Answers Sources workspace. You can set tags at the conversation level using a Digital Employees Builder greeting flow that includes a Script block. This Script block calls a segmentationService to create a user profile that applies the tags. (AM5-10230)

ADD TEXT MARKUP CAPABILITIES TO AGENT RESPONSE TEMPLATES

Agents and supervisors can now format text in the Response Templates that they use to respond to escalations. Agents can select a response template from their My Responses list and edit it using a rich text editor. Supervisors can markup template responses in the Contact Center Responses Templates workspace. This feature lets them format their responses for legibility and accuracy. After editing, agents can send their response to the client as part of a conversation. This new feature helps agents and supervisors create clearer responses to escalations. (AM5-10232)

MANAGE AGENT WORKFORCE STATUS

Built-in agent statuses are now customizable for a wider range of agent activities. Supervisors can create new statuses for each escalation team on the new Statuses tab of the Contact Center Escalation Team workspace. Agents then see and use these statuses as needed. Supervisors can view real-time agent statuses in the Agent Summary subpanel of the Contact Center Supervisor workspace.

The default statuses, Online, Away, Busy, and Offline, act as parent statuses with other statuses attached to them. For example, there might be several descriptive statuses under the default Away status. (AM5-7461)

1.1.1 Release 6.4.1

There were no significant changes. Please Section 2 for all changes.

2. List of All Changes

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

2.1 RELEASE 6.4.0

2.1.1 New Features

CORE ADMIN UI

- Allow removal of all data within a spanless entity (AM5-10159)
- Configure HTTP Timeout Properties for Oracle Service Cloud Gateway (AM5-10528)
- Configure HTTP Timeout Properties for Salesforce Escalation Gateway (AM5-10572)

CORE AGENT VIEW

- Allow agents to set additional custom status message (AM5-7461)
- Allow agents to user formatted response templates (AM5-10232)

CORE BPN

- Add override to allow BPN to retain control upon IDK conflicts (AM5-10329)

CORE ESCALATION

- Properties on EscalationQueue to allow an escalation to be abandoned and a conversation closed if we exceed a certain number of timeouts+rejects (AM5-10394)

CORE FAQs

- Allow users to set tags on knowledge sources in Amelia Answers and use them to filter sources during conversation (AM5-10230)

CORE FRAMEWORK

- Support UiPath cloud and on-prem Orchestrator (AM5-10357)

CORE OTHER

- Add the domain name or domain code to the conversation report window (AM5-10164)

CORE SECURITY

- UI Bundle custom icons editor has incorrect user experience (AM5-10505)

CORE UI

- Added new experimental main Amelia UI available at /Amelia/admin/ng/amelia (AM5-9999)
- Display actual size of variable in Debug (AM5-10226)
- Rename cognitive providers and cognitive tasks (AM5-10272)
- Add ability to add default escalation attributes and queue in Digital Employees Builder workspace (AM5-10360)

DIGITAL EMPLOYEE BUILDER (DEB)

- Allow adding SIP headers on the Voice property tab in Builder blocks (AM5-10466)

GATEWAY SALESFORCE

- Add end user attachments to the corresponding case in Salesforce (AM5-10200)

JAVA SDK

- SDK changes to include allowNpsCollection in FaqAdditionalDetailMessage (AM5-10140)

VOICE NG SERVICE

- Remove HTML tags before sending to Voice Speech Synthesis (AM5-9979)

2.1.2 Bugs

CORE ADMIN UI

- Unnecessary validation when we click on fields in FAQ refresh schedule (AM5-9990)
- UI Bundle custom icons editor has incorrect user experience (AM5-9991)
- Opening User immediately marks it as changed in Admin UI (AM5-10016)
- All/Sources widget in Amelia Answers show error when user has no permissions (AM5-10110)
- Change label and add hint for autoDeployExecutionGroups in Integration Flow info form (AM5-10116)
- Empty languages are observed in Change Language modal (AM5-10132)
- In Agent View UI, closing widgets causes the edit button to disappear from view (AM5-10134)
- Cannot unselect a grammar from intents (AM5-10190)
- Text right panel is not readable in white theme for new Amelia UI (AM5-10220)
- Duplicate escalation notifications are visible when user is working with BPN designer (AM5-10247)
- Fix RCE vulnerability in BPN Groovy Scripts (AM5-10249)
- Authorization in web actions cannot store password (AM5-10268)
- Tooltip for Amelia Says task in BPN overlays the block contents preventing ability to interact (AM5-10290)
- The runtime input variables in Integration are not scrollable (AM5-10302)
- Modifications to the URL in one web action are causing changes to the URL in a different web action. (AM5-10367)
- It is possible to undeploy referenced Digital Employees Builder flow (AM5-10433)
- Updating Max Agent Active Chats for agent in Contact Center not working (AM5-10481)
- Add a check to prevent users from setting timeout for Cognitive Tasks less than a second (AM5-10569)

CORE AGENT VIEW

- Unable to access domain and escalation Response Templates without global `AUTHORITY_CONVERSATION_PICKUP` (AM5-10507)

CORE BPN

- `cmService.getConversationResources` returns unordered entries (AM5-8411)
- In Spanish if a user says "I don't know" and even if we have `idk` edge, its taking the `bpn:otherwise()` path (AM5-9550)
- Custom UI List Autocomplete Form detect intent when Allow for intent detection in form input is disabled (AM5-10098)
- BPN deletion/undeployment failing when BPN contains references to deleted BPNs (AM5-10464)
- There is no option to add dynamic grammar (AM5-10585)

CORE ESCALATION

- Direct Escalation doesn't work when there are execution variables with more than 2000 characters (AM5-10322)

CORE FAQs

- Refresh the FAQ document/Sources is not giving time of reindex (AM5-9757)
- FAQ with LLM and French language pack - Some answers are provided in English (AM5-10174)
- URL is not populated when ingested through integration (AM5-10487)
- Integrated knowledge sources strip HTML formatting (AM5-10509)

CORE FRAMEWORK

- Change the size of execution group to 400 in consume ws action config (AM5-10184)
- Users without global permissions cannot fetch cognitive tasks (AM5-10514)

CORE NLU

- Amelia doesn't translate 'bonjour,' correctly when a comma is present (AM5-10102)
- When running a test in Intent Tester, it randomly auto-creates a bunch of identical tests and seemingly never finishes them (AM5-10368)

CORE OTHER

- Amelia-admin-web is Out of Memory on restart because of Lucene (AM5-10310)
- Upgrade momentjs UI library to address vulnerability (AM5-10425)
- Fix migration that breaks when it reaches the limit (AM5-10484)

CORE RESPONSE POOLS

- Response Pools Selection Filter Broken (AM5-10477)
- Multiple times unescaped interaction message is no properly escaped back upon translation (AM5-10521)

CORE UI

- Annotations are incorrectly calculated when using variables (AM5-10109)
- Update custom background image (AM5-10125)
- Table widgets are broken in Digital Employees Builder preview (AM5-10361)
- Opening properties for non-existent intent results in error (AM5-10446)
- Escalation notification is dismissed when user clicks on native browser notification (AM5-10490)

CORE VOICE

- Prevent users from clicking notifications when they are expired (AM5-5423)

DIGITAL EMPLOYEE BUILDER (DEB)

- Consume Utterance doesn't work with in conversation preview (AM5-1650)
- Webactions do not allow input params with the same name(key) (AM5-8562)
- UiPath bot execution using "Use Queue" approach and Callback enabled is always timing out even though values are returned (AM5-10444)
- UiPath Unattended bot execution error is always escalating even when selected to Ignore (AM5-10512)
- Unable to deploy Digital Employees Builder flow when it contains block without configuration created in older versions (AM5-10538)

INTEGRATION SERVICE

- Amelia Web page crashes while fetching large using consume web services (AM5-10377)

LANGCHAIN SERVICE

- Amelia Answers responds with "No" to statements that are not questions (AM5-9674)
- Langchain OpenAi FAQ sometimes returns source titles (AM5-10137)

LLM MODEL SERVER

- Amelia Answers document parsing doesn't work for non-English documents (AM5-10586)

2.2 RELEASE 6.4.1

2.2.1 New Features

CONDUCTOR CLI

- Display flow name in logs in Digital Employee Builder migration (AM5-10634)

CORE FRAMEWORK

- Invoke Push Notification Service in engine based on conversation attributes (AM5-10625)

GATEWAY FIREBASE

- Cache Firebase tokens in Gateway (AM5-10694)

GATEWAY REST

- Amelia Rest API to delete flow and asset (AM5-10623)

JAVA SDK

- Update SDK EscalationQueue for new auto close properties (AM5-10589)

2.2.2 Bugs

CONDUCTOR CLI

- Conductor integration flow export command always includes all dependencies (AM5-5608)
- Conductor CLI not able to import item based on name/id (AM5-9162)
- Property set imported even though amelia-integration-property-set-import command was not defined (AM5-9415)

CORE ADMIN UI

- Older versions of spanless entities stay within domain upon deletion (AM5-10158)
- Option to remove from multiselect missing (AM5-10583)
- Clicking auto intent models causing revision to be updated. (AM5-10616)
- Cannot update Firebase gateway without re-submitting Google JSON (AM5-10662)

CORE AGENT VIEW

- Agents unable to interact with custom statuses (AM5-10624)

CORE BPN

- Amelia BPN UI requires "queues" access and throws "unnecessary" warnings (AM5-10654)

CORE FAQs

- Langchain prompts uploaded through content manager are no longer working. (AM5-10607)
- Semnet document refresh event trigger should be cancelled on deletion of document. (AM5-10641)

CORE FRAMEWORK

- OpenAi Embedding is called even if OpenAI provider is disabled but with Embedding task config enabled. (AM5-10632)

CORE SEMNET

- Langchain document response is not working in admin web and bpn script (AM5-10725)

CORE VOICE

- SSML tags were stripped along with HTML tags when passed to Amelia Voice (AM5-10653)

3. Component Versions

This section provides a detailed list of the version numbers for each component included in this release.

Table 1. Component Software Versions

Type	Amelia Release								
	6.4.0	6.4.1							
Custom User Interface	6.0.16								
HAproxy	2.8.3								
Percona	8.0.29-21.1								
Java JDK	11.0.22.7.1								
Redis/Redis Sentinel	7.0.13								
AV Gateway	1.2.8								
Syntaxnet	1.0.10								
Duckling	6.4.0								
amelia-coref-service	6.4.0								
amelia-assignment-en_us	5.7.0								
amelia-robertaqa-en_us	5.7.0								
amelia-facial-recognition	6.4.0								
amelia-embedding-service	6.4.0								
amelia-LangChain-service	6.4.0								
amelia-weaviate-service	1.24.6								

Table 2. Gateway Versions

Type	Amelia Release									
	6.4.0	6.4.1								
Alexa	6.4.0	6.4.1								
Amazon Lex	6.4.0	6.4.1								
Amazon Connect Escalation	6.4.0	6.4.1								
Cisco ECE *	6.4.0	6.4.1								
Digital First Omnichannel	6.4.0	6.4.1								
Email	6.4.0	6.4.1								
Facebook Messenger	6.4.0	6.4.1								
Firebase Cloud	6.4.0	6.4.1								
Genesys Cloud Chat	6.4.0	6.4.1								
Genesys PureCloud	6.4.0	6.4.1								

Type	Amelia Release										
	6.4.0	6.4.1									
Genesys PureConnect	6.4.0	6.4.1									
Genesys PureEngage	6.4.0	6.4.1									
Gateway Service	6.4.0	6.4.1									
Google Chat	6.4.0	6.4.1									
InContact Escalation	6.4.0	6.4.1									
LinkMobility	6.4.0	6.4.1									
LiveEngage Messaging	6.4.0	6.4.1									
Meta Workplace	6.4.0	6.4.1									
Microsoft Teams	6.4.0	6.4.1									
Oracle Digital Assistant	6.4.0	6.4.1									
Oracle Service Cloud (REST)	6.4.0	6.4.1									
PEGA Chat	6.4.0	6.4.1									
REST	6.4.0	6.4.1									
Salesforce Chat	6.4.0	6.4.1									
Salesforce Escalation	6.4.0	6.4.1									
ServiceNow Chat Classic	6.4.0	6.4.1									
ServiceNow Agent Chat	6.4.0	6.4.1									
ServiceNow Escalation	6.4.0	6.4.1									
ServiceNow Virtual Agent	6.4.0	6.4.1									
Slack REST (V2)	6.4.0	6.4.1									
Solidus	6.4.0	6.4.1									
Sprinklr	6.4.0	6.4.1									
Symphony	6.4.0	6.4.1									
Twilio	6.4.0	6.4.1									
Twitter	6.4.0	6.4.1									
Webex	6.4.0	6.4.1									
Webex Teams	6.4.0	6.4.1									
Zendesk Sunshine	6.4.0	6.4.1									

* ECE: Cisco Enterprise Chat and Email

Table 3. Amelia Integration Framework (AIF) Versions

Type	Amelia Release										
	6.4.0	6.4.1									
Integration-Service	6.4.0										

4. Amelia 6.4.x System Architecture

This diagram reflects the current architecture of the Amelia software system.

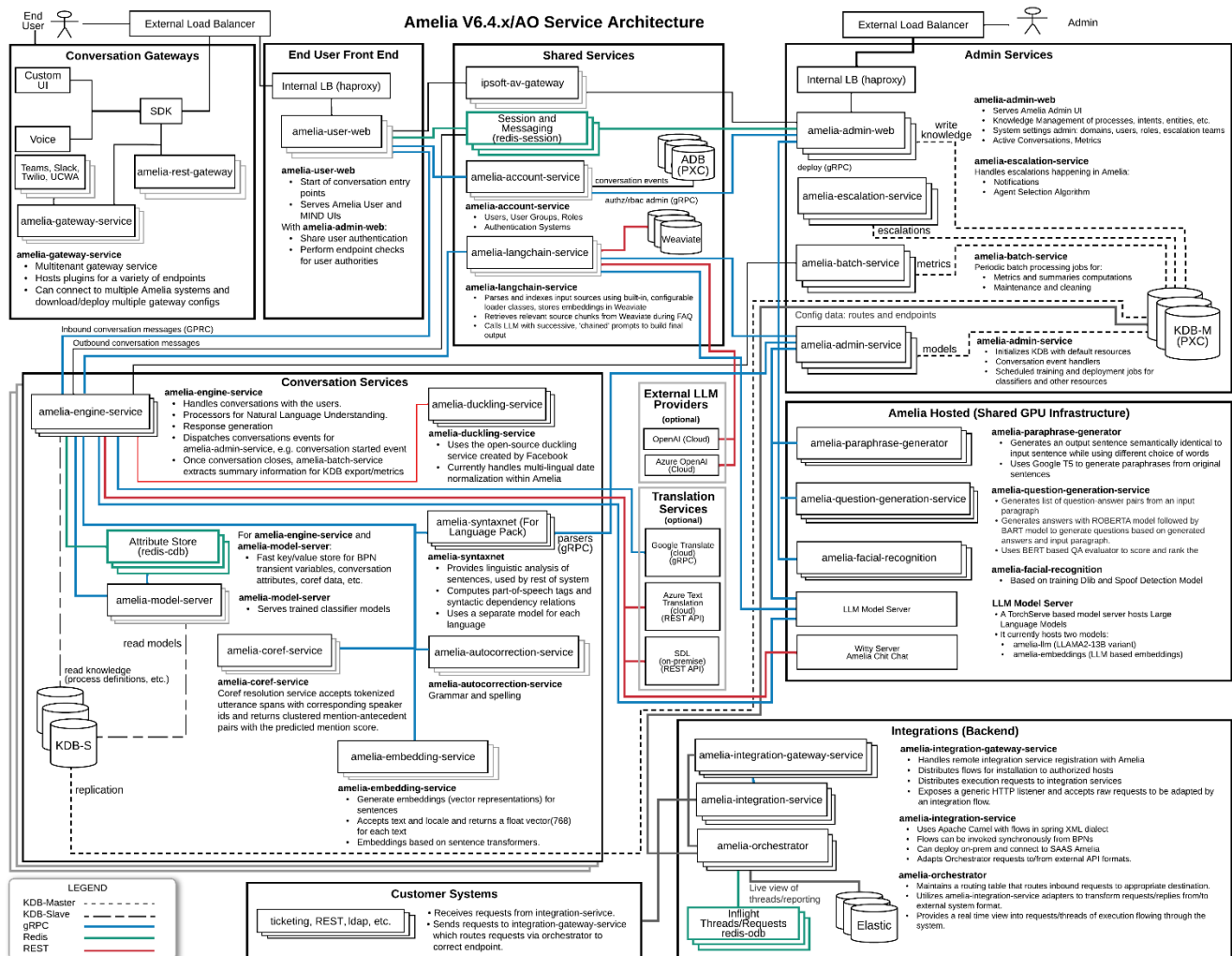


Figure 1. Amelia 6.4.x System Architecture

5. Glossary

This table describes common terms used in these release notes.

Table 4. Glossary of Terms

Term	Definition
ABA	Amelie Builds Amelia is a feature that dynamically builds digital employees.
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.
DEB	Digital Employee Builder is a feature that allows users to create flows that map Amelia's responses within conversations.
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.

Term	Definition
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).
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.
JWT	JSON Web Token is an open standard that defines a compact and self-contained way to securely transmit information between parties as a JSON object.
LDAP	The Lightweight Directory Access Protocol (LDAP) is an open cross platform protocol used for directory services authentication. LDAP is a language application used to communicate with directory services to authenticate users.
LLM	A Large Language Model is a form of artificial intelligence trained on vast amounts of content to understand a broad range of topics and return answers. A language model is a machine learning model trained to predict the order of words in a sentence to extract meaning.
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.

Term	Definition
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.
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.
XML	Extensible Markup Language is a markup language and file format used to store, transmit, and reconstruct data. It's structure is both human readable and machine readable.