



Cognitive Agent

Amelia 6.14.3 Release Notes

(Document version 1.5)

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Document History

Author	Version	Date	Comments	Final Approval?
Amelia Research & Development	1.0	February 25, 2025	Added bug fixes and new functionality for 6.14.0 and 6.14.1 releases	Yes
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Author	Version	Date	Comments	Final Approval?
Amelia Research & Development	1.3	April 10, 2025	Added breaking change for 6.14.3 release	Yes
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1. Highlights by Release

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

1.1 BREAKING CHANGES

1.1.1 6.14.0

WHOLE PACKAGE import java.util.* AND .setDefault METHODS NO LONGER POSSIBLE IN GROOVY SANDBOX SCRIPTS

Use of `Locale.setDefault` and `TimeZone.setDefault` causes negative effects when used in a Groovy script sandbox. To address this issue, we have prevented use of whole package import `java.util.*` in scripts.

This affects use of `java.util.*`, `TimeZone.setDefault`, or `Locale.setDefault` in BPNs, DEB Flows, or Groovy scripts. Whole package import also is bad practice in scripts. It is forbidden after this release. All instances must do one of two things prior to using this release:

- **Recommended:** Inventory your scripts and BPNs to see if there are any cases of these methods and use of `java.util.*`. Create a BPN, DEB flow, or Groovy script that calls `Locale.setDefault(Locale.UK)` or any locale and `TimeZone.setDefault('EST')` or any time zone. There should be no errors except in cases where `Locale.setDefault` and `TimeZone.setDefault` methods are used. Use `import java.util.Locale` to work with locale values and `import java.util.TimeZone` to work with timezone values.
- **Maintain current behavior:** This is NOT recommended. It will allow current effects to continue to manifest. However, it can be accomplished by creating one text file called `whitelist.config` on all hosts at:

```
/apps/IPsoft/amelia/amelia-common-config/scripting/groovy/sandbox/whitelist.config
```

containing list one line:

```
starImport java.util
```

Again, *this is not recommended* and should only be done if time is needed for people to correct scripts. *Once scripts are corrected, use the recommended approach above.* (AM5-13363)

DOMAIN CHANGE HAPPENING WHEN USING A PARENT DOMAIN'S INTENT FROM A CHILD DOMAIN

Domain switching now requires activating the *Switch Out From Domain During Conversation* setting. Configure this setting in the Configuration tab of a Domains workspace. It's in the Domain Switching panel in the Configuration tab. Domains workspaces are in the Administration module.

This change alters previous domain switching behavior. It may impact cases where domain switching is implied. In these cases, change the *Switch Out From Domain During Conversation* setting to *Yes*. (AM5-11102)

DON'T ALLOW GLOBAL RESPONSE POOLS TO BE EDITED AND ADD AUTH CHECKS TO RESPONSE POOL APIS FOR DOMAIN

Users must have the RESPONSE_POOL_EDIT authority for the response pool domain. Previously, users with this authority for any domain could edit response pools. This change also applies to moving a response pool between domains. The user must have this authority for the original and target domains. Users might get a Not Authorized error if they're not assigned the authority for a domain. Assign any missing authorities using the Users workspace in the Administration module. (AM5-13171)

1.2 HIGHLIGHTS

1.2.1 6.14.0

INTEGRATION SERVICE NOW INCLUDES CAMEL 4

Amelia's Camel 2 support has reached end of life. With the launch of Amelia 6.5.9/6.14.0, flows can be written to target a Camel 4 runtime. To allow for gradual change, for a period of time, instances will be able to run Camel 2 and Camel 4 Integration Services side by side. However, the goal will be to move flows to Camel 4 and shut down Camel 2 as soon as flows are ported and tested. To run Camel 4 flows, there must be a Camel 4 compatible integration service running for a given API Key and Execution group. Beginning with 6.5.9/6.14.0, Amelia will be providing both Camel 2 and Camel 4 integration services in the “shared” execution group.

Client ISCs will have to install a Camel 4 compatible ISC alongside their current Camel 2 ISC. They can continue to run both ISCs until relevant flows have been ported over, at which time the Camel 2 ISC can be removed.

To have the ability to write flows targeting Camel 2 or Camel 4, the `amelia.app.show-integration-engine=true` property must be set. This currently defaults to false. It will be set to true in a subsequent release as more instances bring their Client ISCs online as Camel 4. With this value set to true, the Integration Flow interface will include Camel 4 options. (AM5-12512)

CREATE BYO LLM COGNITIVE PROVIDER SET-UP EXPERIENCE IN UI

This feature lets Amelia integrate with external and hosted LLMs. This significantly expands Amelia's capabilities. We've added Bearer Token Authentication to connect with a wide range of LLM providers. Clients can access protected resources by including a token in the request header. This eliminates the need for added credentials. It also streamlines the integration process with external and private LLM services.

In the Amelia interface includes a new Cognitive Provider option. This lets clients connect with external and hosted LLM providers. LLM endpoints must support the OpenAI API chat completion specification. Connecting a custom LLM creates a Web Action in Amelia. This Web Action supports Authorization, Proxy, and Certificate functionalities. The Authorization options in Web Actions now has a Bearer Token Authentication method.

The Amelia interface also includes a Custom Embedding Provider option to support embeddings. It only works for Embedding Cognitive Tasks. (AM5-12929)

ALEXA GATEWAY AND SALESFORCE CHAT GATEWAYS REMOVED FROM ADMIN UI

Support for these two gateways has been removed with this release. (AM5-13458) (AM5-13469)

1.2.2 6.14.1

This release is primarily a maintenance release with no highlights.

1.2.3 6.14.2

This release is primarily a maintenance release with no highlights.

1.2.4 6.14.2

This release is primarily a maintenance release with no highlights.

2. List of All Changes

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

2.1 RELEASE 6.14.0

2.1.1 Agent View

BUG

- NPE when getting AgentName for certain Agent AA queries (AM5-13279)

NEW FEATURE

- Auto Route/Auto Pickup Escalation to Agent (AM5-10418)
- Click to Copy User Information (AM5-13110)

2.1.2 Amelia Answers

BUG

- Amelia API list Semnet docs (AM5-12712)
- Conversations in Amelia Answers Responses Take the User to Analytics (AM5-13213)
- Import error (AM5-13266)
- Lenient toggle does not work properly for knowledge source tagging (AM5-13304)
- If sitemap creates too many segments, a timeout may occur when trying to delete the source (AM5-13370)
- Error on export of documents with tags (AM5-13378)
- IndexOutOfBounds if conversational context is not enabled for DocumentFaq (AM5-13490)

NEW FEATURE

- Implement table support and chunking logic for html pages (AM5-13147)
- Implement Image and OCR Support for html (AM5-13148)
- When using URL for Amelia Answers it should be able to use proxy and authentication (AM5-13244)
- Allow clickable in-line citations, to display segment info (AM5-13248)
- Allow knowledge segmentation to filter by groups of tags (AM5-13313)

- Expose Query Relevance analysis to user (AM5-13421)

2.1.3 Autocorrection Service

NEW FEATURE

- Migrate Autocorrection Service to python3.11 (AM5-13253)
- Update onnxruntime to work w/ python3.11 (AM5-13504)

2.1.4 Conductor CLI

BUG

- Not migrating Web actions with property sets (AM5-13290)

NEW FEATURE

- Remove unreferenced question ID from "ask for the entity with response pool" task on import BPN command (AM5-13459)

2.1.5 Contact Center

NEW FEATURE

- Open Agents Active Conversations from Supervisor dashboard (AM5-12438)

2.1.6 Core Admin UI

BUG

- Duplicate Web Services in BPN Impacting Selection and Navigation. (AM5-13103)
- New Agent UI: The Process tab in loading state (AM5-13138)
- Cannot delete entity in one domain because of use in another unrelated domain (AM5-13169)
- Agent: My Responses tab is not showing properly (AM5-13286)
- Analytics: Dates overlap on Amelia Answers analytics graph. (AM5-13302)
- Agent Spoken Language is not added at the end (AM5-13303)
- voice.tts_mask property not present in v6 (AM5-13310)
- Conversation flows: Overlap issue on conversation flows folder (AM5-13384)

NEW FEATURE

- Mark Genesys Cloud Escalation Gateway Deprecated (AM5-11730)
- React 19 Upgrade [ng] (AM5-11772)
- Add more details to Cognitive Provider Selection Dropdown in Cognitive Task (AM5-12638)

- Refactor lazy loading dropdown API (AM5-12749)
- Restrict upload of favico to only those file types allowed by specification (AM5-13204)
- Validate favicon file types [ui] (AM5-13205)
- API to get list of ConsumeWS actions should return domain code and also allow returning more than 100 items (AM5-13207)
- Upgrade styled-components to latest version in NG (AM5-13316)
- Camel engine version should be visible in Integration Logs (AM5-13445)
- Remove Alexa Gateway from Admin UI (AM5-13458)
- Remove Salesforce Chat Gateway From Admin UI (AM5-13469)
- Builder NG. Highlight table rows and columns for large data grids (AM5-4099)
- Update react-tiny-popover to latest in NG UI (AM5-8058)

2.1.7 Core Authentication System

NEW FEATURE

- Do not allow global response pools to be edited, and add auth checks to response pool apis for domain (AM5-13171)

2.1.8 Core BPN

BUG

- "matches" function only allows using single quotes (AM5-12647)
- Spanish Translation - I between it has to Speak in English TTS Voice. (AM5-13086)
- Ban groovy scripts inside sandbox from running Locale#setDefault or TimeZone#setDefault (AM5-13363)

NEW FEATURE

- Do not allow variables with invalid names in DEB (AM5-4620)
- Auto Populate for Auto Complete Script Library Functions (AM5-8470)

2.1.9 Core Framework

BUG

- Debug messages cannot be independently suppressed for agent (AM5-12644)
- SSML attributes are being deleted (AM5-13442)
- Shared executions from ISC apiKey domains fail (AM5-13509)

NEW FEATURE

- When an agent accepts an escalation, the session mode is initially set to OBSERVER (AM5-13451)

2.1.10 Core Framework

NEW FEATURE

- Add more details to Cognitive Provider Selection Dropdown in Cognitive Task (AM5-12339)
- Integration Flow: Add Search By Deployed and Latest Integration Engine Id (AM5-13463)

2.1.11 Core LLM

NEW FEATURE

- Create BYO LLM Cognitive Provider Set-Up Experience in UI (AM5-12929)
- Improve system tests framework for LLMs (AM5-13154)

2.1.12 Core NLU

BUG

- Semantic Role Labeler fails on large sentences (AM5-12676)
- Clarification on Azure Translation Behavior and Next Steps (AM5-13377)

2.1.13 Core Other

BUG

- Domain Change happening when using a parent domain intent from a child domain (AM5-11102)
- Mind View does not always connect to same engine instance (AM5-13439)

NEW FEATURE

- Improve API documentation of admin/training/predict* (AM5-13410)
- Update Core dependencies due to CVEs (AM5-13411)

2.1.14 Core UI

BUG

- react-vis is not working with React 19 (AM5-13413)

- Users Experience Blank Screen During Chat Conversations in AU-Showcase IT Domain (AM5-13428)
- Internally managed integration flows should not be visible (AM5-13444)
- Amelia 6.13.0 UI issue (AM5-13452)
- UI Issue: Cursor Jumping in Search Field – Impacting Multiple Clients (AM5-13478)
- Audit log should show diff (AM5-13009)
- Internally managed integration flows should not be visible [backend] (AM5-13453)

2.1.15 Coref Service

NEW FEATURE

- Migrate Coref Service to Python3.11 (AM5-13254)

2.1.16 DEB

BUG

- Unable to create a flow with Request Task (AM5-13280)
- Unable to create flow with Request Block by selecting "Request more than one" (AM5-13299)
- Dropdown is not working in controlled mode (AM5-13306)

NEW FEATURE

- Remove deprecated API for checking design assistant status (AM5-13161)

2.1.17 Embedding Service

NEW FEATURE

- Migrate Embedding Service to Python3.11 (AM5-13255)

2.1.18 Gateway Rest

NEW FEATURE

- Add language specifying behavior of partial bodies (AM5-13257)

2.1.19 Gateway Service

BUG

- Gateway Service on app02 has unusually high traffic even though there are 5 other nodes (AM5-12556)

NEW FEATURE

- Update Amelia Gateway Service due to CVEs (AM5-13440)
- Feature Remove Alexa Gateway Plugin from build. (AM5-13457)

2.1.20 Integration Service

BUG

- Error saving integration template integrationEngineId: must not be null, Integration Engine is required (AM5-13423)

NEW FEATURE

- Add support for Camel 4 (AM5-12512)
- Feature Update Amelia dependencies due to a few CVEs (AM5-13422)

2.1.21 Metrics

BUG

- UI Volume vs Billing API Discrepancy (AM5-12626)

2.2 RELEASE 6.14.1

2.2.1 Core Admin UI

BUG

- Supervisor: Agent summary is not fully visible AM5-13514

2.2.2 Core Framework

BUG

- UI is allowing to create Script Library, Conversation Flow and BPN in root folder, but errors out AM5-13515

2.2.3 Core Orchestrator

NEW FEATURE

- Fix Orchestrator dependencies with spring-data-elastic AM5-13528

2.2.4 Core Other

BUG

- Groovy sandbox forbids permissible java.util inner classes (AM5-13558)

2.3 RELEASE 6.14.2

2.3.1 Amelia Answers

BUG

- In Line Citations Not Working in 6.14.1 (AM5-13574)
- Fix large and nested sitemaps for 6.14.2 (AM5-13593)

2.3.2 Core Escalation

NEW FEATURE

- Add stomp subscription timeout and multiple max for websocket in Amelia Escalation (AM5-13601)

2.3.3 Core LLM

BUG

- Fix the integration script for Bearer Token Auth (AM5-13578)

2.3.4 Core Security

BUG

- After upgrade from 6.13.0 to ameliav6-14-1-rpms SSO fails with 500 Error (AM5-13564)

2.3.5 Gateway Genesys PureEngage

NEW FEATURE

- Add Domain property to require user activity to extend conversation (AM5-13529)

2.3.6 Integration Service

NEW FEATURE

- Update Amelia Integration Service to the latest Spring Boot 3.4.3 to fix some CVE (AM5-13581)

2.4 RELEASE 6.14.3

2.4.1 Amelia Answers

BUG

- Sources not loading (AM5-13629)
- Sitemap failures on one site block the whole sitemap from finishing (AM5-13642)

2.4.2 Core Admin UI

BUG

- User profile not opening - UI (AM5-13702)

NEW FEATURE

- Update Core to have Camel 4.10.2 as the camel engine instead of 4.10.0 (AM5-13725)

2.4.3 Core Framework

NEW FEATURE

- CamelMigrateAssistant throws incomplete error on missing engine (AM5-13721)

2.4.4 Gateway Genesys PureEngage

NEW FEATURE

- Domain Property to Require User Activity to Extend Conversation [backend] (AM5-13529)

2.4.5 Integration Service

BUG

- Incorrect xml definitions for camel-http and camel-https (AM5-13711)

NEW FEATURE

- Update Camel4 to 4.10.x series LTS (AM5-13580)
- camel-4.9.0 copy from UI Removing CDATA (AM5-13611)
- Adjust default logging level of Amelia-integration-c4-service (AM5-13659)
- Updating Integration Service to Camel 4.10.2 (AM5-13724)

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								
	6.14.1	6.14.2	6.14.3						
Custom User Interface	6.0.33		6.0.34						
HAproxy	2.8.3								
Percona	8.0.29-21.1								
Java JDK	11.0.24								
Redis/Redis Sentinel	7.0.13								
AV Gateway	1.2.10								
Syntaxnet	1.0.11								
Duckling	6.14.0								
amelia-assignment-en_us	5.7.0								
amelia-coref-service	6.14.0								
amelia-embedding-service	6.14.0								
Amelia-models-en_us	6.12.0								
amelia-robertaqa-en_us	5.7.0								
amelia-LangChain-service	6.14.0	6.14.2							
amelia-weaviate-service	1.24.6								

Table 2. Gateway Versions

Type	Amelia Release										
	6.14.1	6.14.2	6.14.3								
Amazon Lex	6.14.0										
Amazon Connect Escalation	6.14.0										
Cisco ECE *	6.14.0										
Email	6.14.0										
Facebook Messenger	6.14.0										
Five9	6.14.0										
Firebase Cloud	6.14.0										
Genesys Cloud Chat	6.14.0										
Genesys PureCloud	6.14.0										
Genesys PureConnect	6.14.0										

Type	Amelia Release									
	6.14.1	6.14.2	6.14.3							
Genesys PureEngage	6.14.0									
Gateway Service	6.14.0									
Google Chat	6.14.0									
InContact Escalation	6.14.0									
LinkMobility	6.14.0									
LiveEngage Messaging	6.14.0									
Meta Workplace	6.14.0									
Microsoft Teams	6.14.0									
Oracle Digital Assistant	6.14.0									
Oracle Service Cloud (REST)	6.14.0									
PEGA Chat	6.14.0									
REST	6.14.0									
Salesforce Escalation	6.14.0									
ServiceNow Chat Classic	6.14.0									
ServiceNow Agent Chat	6.14.0									
ServiceNow Escalation	6.14.0									
ServiceNow Virtual Agent	6.14.0									
Slack REST (V2)	6.14.0									
Solidus	6.14.0									
Sprinklr	6.14.0									
Symphony	6.14.0									
Twilio	6.14.0									
Twitter	6.14.0									
Webex	6.14.0									
Webex Teams	6.14.0									
Zendesk Sunshine	6.14.0									
Zendesk Sunshine Escalation	6.14.0									

* ECE: Cisco Enterprise Chat and Email

Table 3. Amelia Integration Framework (AIF) Versions

Type	Amelia Release									
	6.14.1	6.14.2	6.14.3							
Integration-Camel 2 Service	6.14.0									
Integration Camel 4 Service	6.14.0	6.14.2	6.14.3							

4. Amelia 6.14.x System Architecture

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

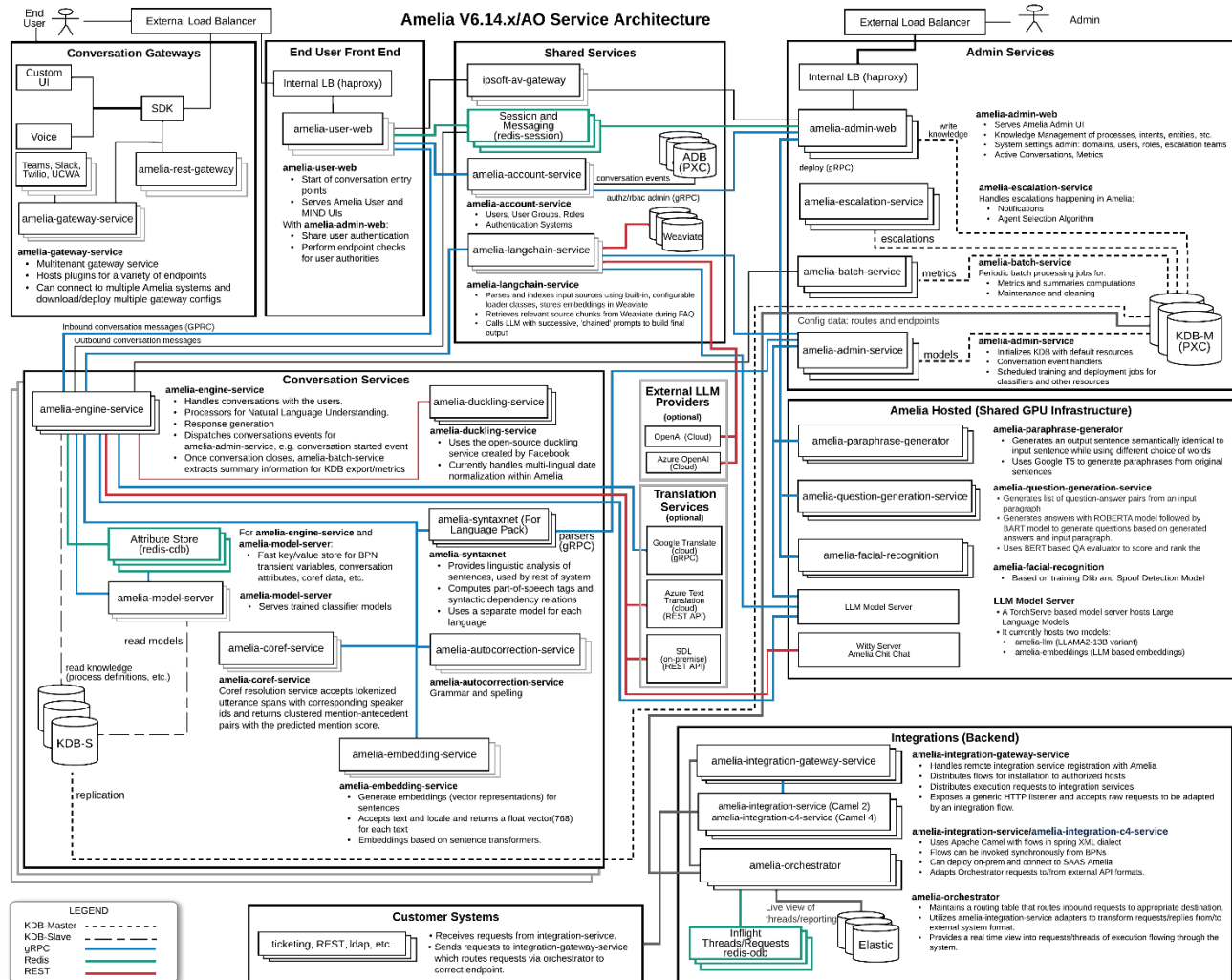


Figure 1. Amelia 6.14.x System Architecture

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.
AVS	Amelia Voice Service is a technology to deliver Amelia functionality through voice interfaces.
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.
CDATA	Character data identifies data between two strings. It marks off data that could be processed as XML or other markup but should not be processed.
CMS	Content Management System is one or more software programs used to create, manage, and publish digital content.
CORS	Cross-origin resource sharing (CORS) allows a web page to access restricted resources from a server on a different domain than the domain that served the web page.
CPU	A central processing unit (CPU) is the most important processor in a computer. Its electronic circuitry executes arithmetic, logic, controlling, and input/output operations.
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.
CSS	Cascading Style Sheets (CSS) is a style sheet language used to specify the presentation of documents written in a markup language such as HTML or XML.
CSV	Comma Separated Values is a text file where row data is separated (delimited) with commas.
DEB	Digital Employees 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

Term	Definition
	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).
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.

Term	Definition
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-premises 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.
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.
URL	A uniform resource locator (URL) points to a resource location on a computer network, for example, a web page on a web server.
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. Its structure is both human readable and machine readable.
XSS	Cross-site Scripting (XSS) attacks inject malicious scripts into the web pages of otherwise benign trusted websites. This allows attackers to bypass access controls and other security measures. While XSS initially described using one or more websites to breach another website, XSS also includes other forms of data injection attacks.