# AI Driven Automation of Release Notes

Streamlining D365 Omnichannel updates with Generative AI

Understanding Release Notes

❖ Published by Dynamics 365 Omnichannel release management team every 2 weeks.

❖ Include details of new, enhanced or repaired functionalities in the product for each release.

❖ Meant for our customers to stay informed about new features and track issue resolutions.

❖ Published Release Note (Released Versions of Dynamics 365 Omnichannel - Release Notes | Microsoft Learn)

Release Notes Workflow
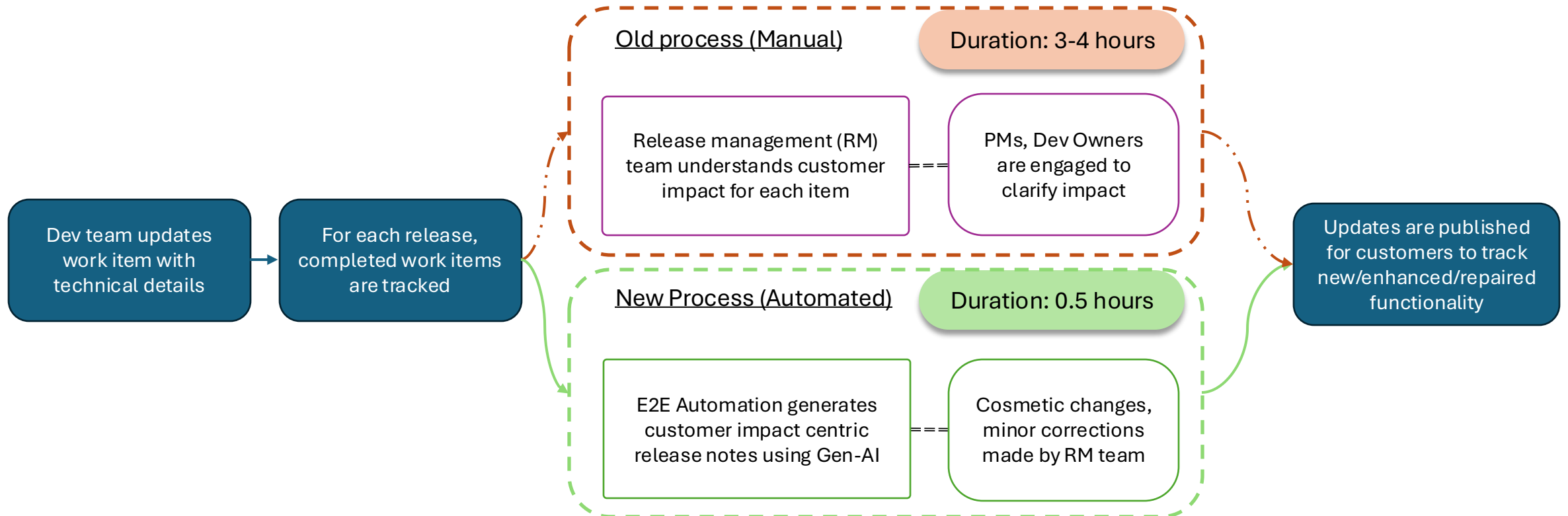
How are we improving the process?

Pain Points

- **Time Consuming Manual process:** Time spent on detailing updates for over 100 work items on a biweekly basis outweighs their value, as the relevance of each note diminishes with each biweekly release.

- **Missed Updates:** Customers and stakeholders report that changes aren't consistently captured.

- **Contextual Gaps:** Understanding each item's impact requires cross-team coordination across time zones, slowing the process down further.

Solution: AI Generated Release Notes

- **Streamlined Workflow:** Use automation to curate end to end flow.

- **Intelligent Automation:** Employ an AI powered data pipeline.

- **Contextual Clarity:** Integrate semantic search (RAG) to anchor context in publicly available product documentation.

- **Security:** Adhere to security and compliance standards, keep within organization's data boundary, use secure authentication mechanism

Impact

- **Time Savings:** Release management team reported process time reduced by > 75% per week, from nearly 4 hours down to 1 hour.

- **Completeness**: More comprehensive updates, ensuring customers stay fully informed.

- **Scalable Efficiency**: A repeatable model that eases load and enhances release communication over time.

"It reduced more than 75% of effort in generating release notes across teams for each train across PM and engineering teams."
~ Srimurugan Kotieswaran, Principal Program Manager

Demo ([Link](#))

PowerAutomate Automation Workflow
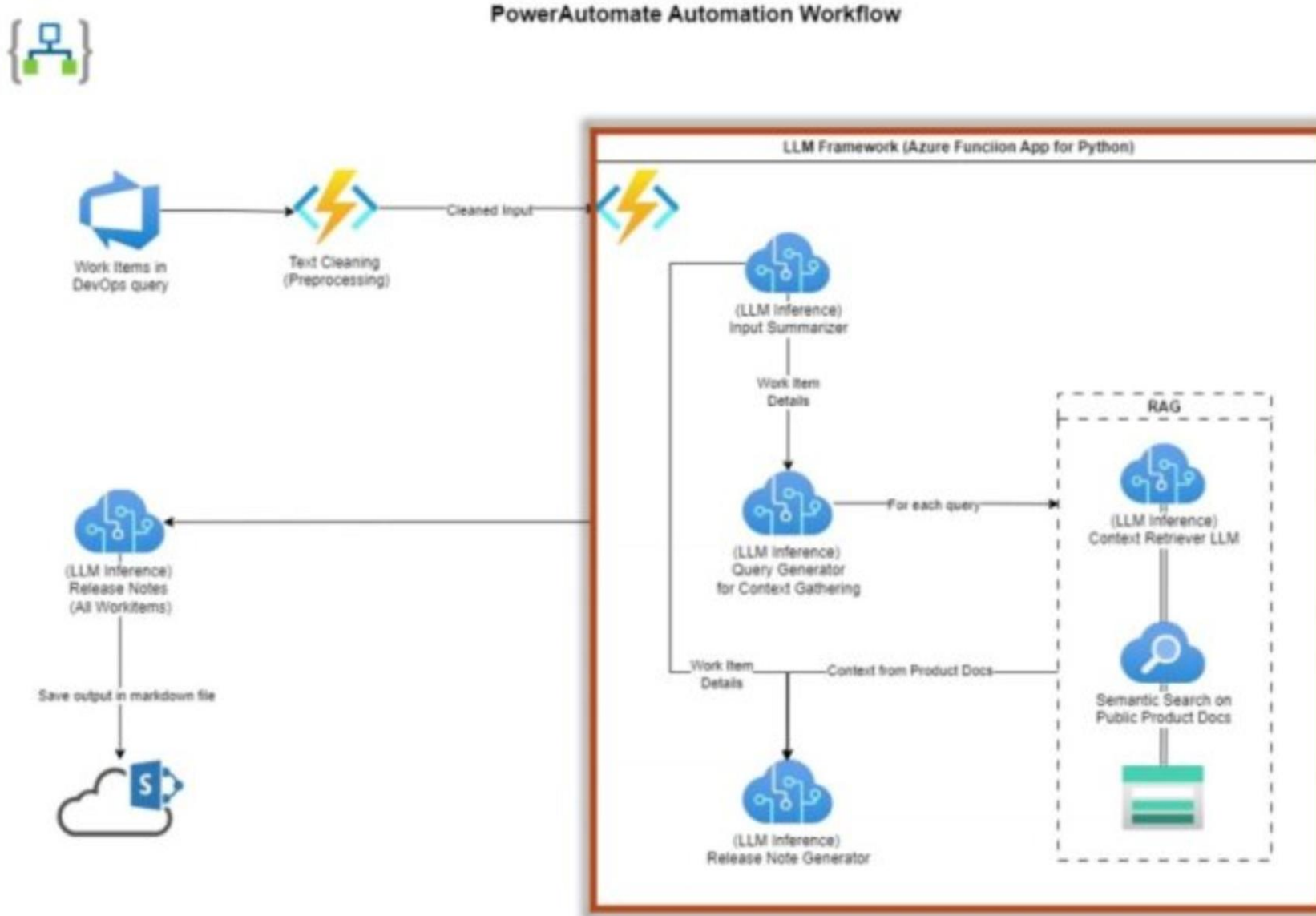
Manually Generated

Update 24092 has the following

New/Enhanced Functionality

- Consult and transfer to a Teams subject matter expert via VOIP in the enhanced voice stack is now Generally available.
- Improving response efficiency and customer satisfaction through Enhanced FIFO prioritization
- Enhances routing capabilities by improving overall service efficiency and reliability
- Enhancements are being made to Queue Prioritization which helps in assignment efficiency and reduces delays due to AgentAvailabilityTrigger

Return to the released versions page.

AI Generated

Release Notes - Update 24092

New/Enhanced Functionality

- Enhances communication capabilities by allowing VOIP consults and transfers with Teams users, improving customer service efficiency.
- The update improves conversation prioritization for async channels like SMS and social media, ensuring more timely responses based on conversation revival and creation times.
- Customers can now use Custom Skill Matching in their assignment configurations, ensuring agents with the right skills handle specific cases, facilitating migration to core services and improving test coverage.
- Improves OmniChannel routing capabilities, enhancing customer service efficiency by ensuring agents handle the most relevant engagements and escalating conversations from bots to human agents as needed.
- Enhancement to Intent Agent Group feature in Record Routing Service supports end-to-end testing of Intent Based Routing, ensuring accurate routing without impacting current functionality.
- Improves assignment efficiency by batching work items in Custom Assignment Queues with OOB queues, reducing delays due to agent availability.
- The API in Europa CLS ensures timely Bot Channel Registration data migration, improving the efficiency of bot provisioning in Omnichannel for Customer Service.
- Bot channel registration data has been migrated from OmniChannel to core services, ensuring seamless customer operations and improved reliability in digital messaging channels.
- Agents will now automatically be set to Busy DND during EVV channel escalations, improving their availability management and ensuring seamless transitions to voice/video interactions.
- New CloseConversation dashboard enhances tracking of severe failures in production, ensuring better monitoring and proactive issue resolution.
- Org provisioning will now succeed even if Messaging in OCInfra is deprecated, ensuring uninterrupted setup and configuration of your organization within Dynamics 365.
- Automated calling now completes faster and avoids timeouts for large volumes, enhancing efficiency and reliability when handling high call volumes and DR numbers.
- In-memory generation of Intent Ruleset for OmniChannel ACD in OneCRM ensures optimized server resource utilization without changing customer-facing behavior or impacting production stability.
- Enhanced queue overflow handling in Unified Routing ensures seamless conversation transfers during high load situations, preventing service disruptions and maintaining consistent customer support quality.
- Retrieve agent availability for OmniChannel ACD AssignmentVNext in OneCRM to enhance customer service efficiency by ensuring agents are available when needed.
- Fixes false positive bug in HM Migration and ensures accurate phone numbers, improving customer data integrity.

Repaired Functionality

- Conversations with missed invites or agent timeouts are now automatically reassigned, reducing wait times and abandonment rates, thus improving overall customer experience.
- Prevents failure of work item triggers in Custom Assignment Queues, ensuring smooth operation and rollout of AssignmentEngineVNext for affected organizations.
- Customers using Custom Assignment with exact match rule for SkillType and null rating will now experience correct agent assignments, ensuring smooth operation and preventing assignment failures.
- Assignment Component provisioning via Core Services now avoids failures in legacy infrastructure, ensuring seamless service operations and improved reliability for users relying on legacy storage.
- Customers will experience seamless call transfers to human agents, improving service efficiency and reducing frustration from call handling errors in the Queue level bot.
- Prevents creation of duplicate conversations during rollback, ensuring seamless customer experience in chat engagements.
- Fixed an issue to ensure proper functioning of custom skill match in assignment rulesets, preventing failures in customer assignments.
- Bug fix: Prevents unnecessary new conversations during rollback, ensuring smooth customer interactions and reducing failures in Live Chat and other messaging channels.
- Customers using InitChat for asynchronous channels will no longer experience failures due to engagement context fields exceeding the maximum length of 100 characters.
- Fixed issue preventing older Live Work Streams from being found, enabling seamless migration to core services and avoiding delays in migration plans.
- Fixed an issue to ensure reliable migration rollback support and on-demand backfill for async channels, enhancing data integrity and operational efficiency in your CRM processes.
- Fixes issue where customer disconnects closed bot conversations, ensuring persistent chat functionality and preventing manual conversation closure by agents, thus improving customer service efficiency.
- Phone number purchases in Azure Communication Services (ACS) now have a longer timeout, preventing service disruptions and ensuring phone number availability.
- Fixed supervisor assignment issue in OC CCaaS for customers onboarded to PACS without cosmos hydration enabled, ensuring smooth supervisor assignment scenarios.
- Prevents initialization failures in CTQ when a customer contact is already populated, ensuring smoother operation and fewer errors.

Onboarding

- 2 teams onboarded (D365 Contact Center, CIF); In progress (Project Sophia, D365 Sales)

- Bring your own product documentation (preferably in markdown format)

- Deploy our Logic App in your azure subscription: Release-Notes-LogicApp-Onboarding

- Reach out: tkishnani@microsoft.com, bkhetharpal@microsoft.com, clafernandes@microsoft.com

Links

- Published Note: Microsoft Dynamics 365 Omnichannel/Unified Routing - Update 24115 - Release Notes | Microsoft Learn | All: Released Versions of Dynamics 365 Omnichannel - Release Notes | Microsoft Learn

- Demo: AI Generated Release Notes Demo.mp4

- Repo: releasenotesappsecure - Repos

Future Scope

1. Technical Improvements

   ❖ **Prompt Engineering**: Add clear examples and detailed instructions based on manual feedback, evaluate outputs at each stage using human and LLM based evaluation for prompts, tweak model's hyperparameters.

   ❖ **Upgrade RAG Setup**: Enrich indexes, use pertinent embedding models, use well-formatted product documentation, implement advanced techniques like GraphRAG.

   ❖ **Handling Complex Work Items:** Building workflow to handle nested items like features and user stories.

2. Process Improvements

   ❖ **Standardize Keywords**: Use official product documentation terms in work items.

   ❖ **Highlight Customer Impact:** Add customer impact details in the Release section of work items.

   ❖ **Improve Filtering:** Tag work items with direct customer impact for better filtering.

   ❖ **Minimize Manual Intervention**: Make the process fully automated, bring time down to 5-10 min

High Level Design
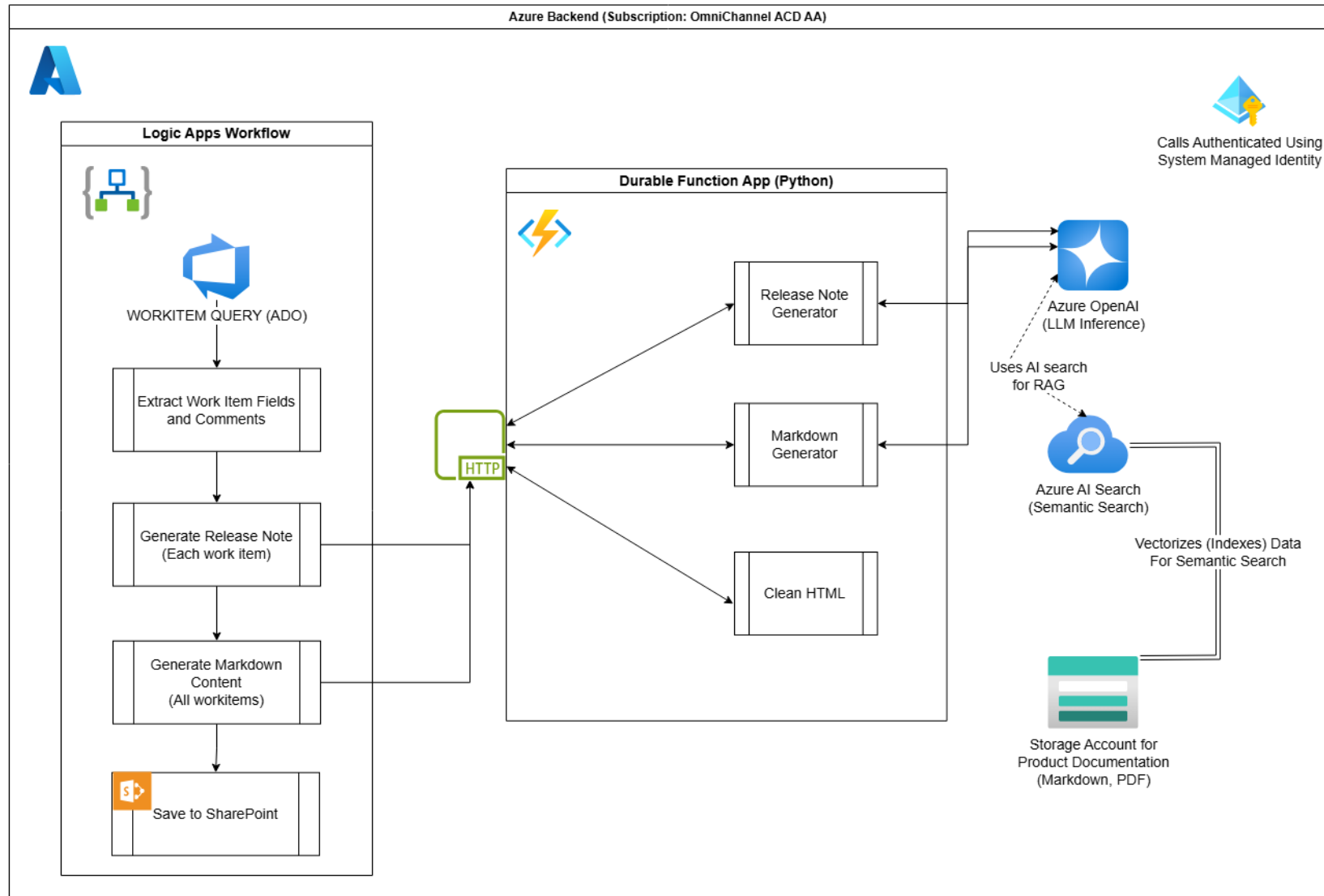
LLM Based Prompt-Chaining Framework
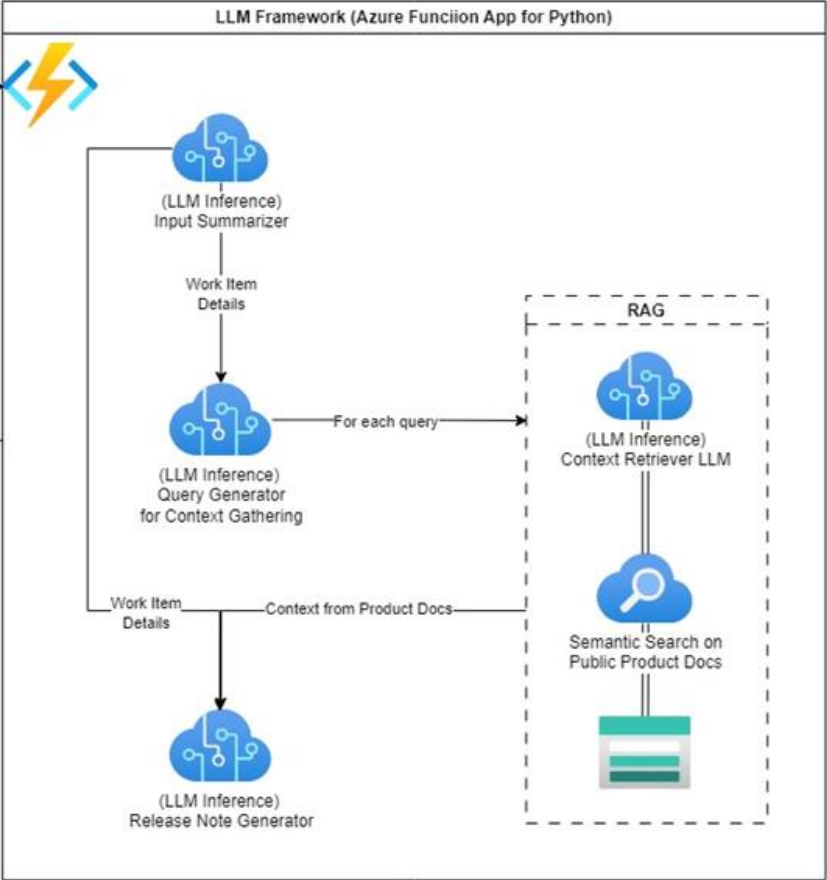

```
*** INPUT SUMMARIZATION ***
{
    "ShortDescription": "Fixed bug where external participant joining call did not change status to active in Dynamics 365 OmniChannel Voice
    Connector Core.",
    "ActivityType": "Bug fix",
    "Keywords": ["external participant","call status","OmniChannel","Voice Connector"]
}
```

```
*** QUERY GENERATION ***
Queries:
1. How does the Dynamics 365 OmniChannel Voice Connector handle status changes for external participants joining a call?
2. What are the best practices for managing and tracking call statuses in Dynamics 365 OmniChannel, specifically for external participants?"
3. Are there any known issues or troubleshooting steps related to external participants' status not updating correctly in Dynamics 365
OmniChannel Voice Connector?
```

```
*** RETREIVAL-AUGMENTED GENERATION ON PRODUCT DOCUMENTATION ***

Succeeded for query:  How does the Dynamics 365 OmniChannel Voice Connector handle status changes for external participants joining a call?
Content When an external participant joins a call in Dynamics 365 OmniChannel Voice Connector, the status of the conversation remains in the
active state with the agent on the external number as the new primary agent. The capacity of the original agent is immediately released
[doc4].

Succeeded for query:  What are the best practices for managing and tracking call statuses in Dynamics 365 OmniChannel, specifically for
external participants?
Content To manage and track call statuses in Dynamics 365 OmniChannel, especially for external participants, follow these best practices:
1. **Status Transitions**: Ensure that the call status transitions correctly from "Open" to "Active" when an external participant joins the
call. This helps in accurate tracking and management of call statuses [doc1].
2. **Agent Capacity Management**: When transferring calls to external participants, the original agent's capacity should be released
immediately to avoid capacity issues [doc4].
3. **Monitoring and Reporting**: Use the Omnichannel dashboards to monitor and report on call statuses and transitions, ensuring all
participants' statuses are accurately reflected [doc5].

Skipped for query as no information found:  Are there any known issues or troubleshooting steps related to external participants' status not
updating correctly in Dynamics 365 OmniChannel Voice Connector?
```

```
*** FINAL OUTPUT ***
RELEASE NOTE:  Fixed bug in Dynamics 365 OmniChannel Voice Connector where external participant call status now correctly changes to
"Active", enhancing call management and status tracking.
```

Components

End-to-End Automation (Logic App)

- Extracts Azure DevOps work item content
- Triggers Azure Function APIs via HTTP call
- Publishes markdown files to SharePoint

LLM Framework (Prompt Chaining)

- Breaks process into MECE tasks
- Sequential LLM calls via Azure OpenAI
- Output of each step feeds into the next

Backend (Azure Durable Function App)

- Deploys backend logic in a stateless server
- Manages long-running process over HTTP

Context Retrieval (RAG wth Azure AI Search)

- Indexes and vectorizes documents for semantic search
- Leverages Dynamics 365 for Customer Service public docs

PowerAutomate Automation Workflow
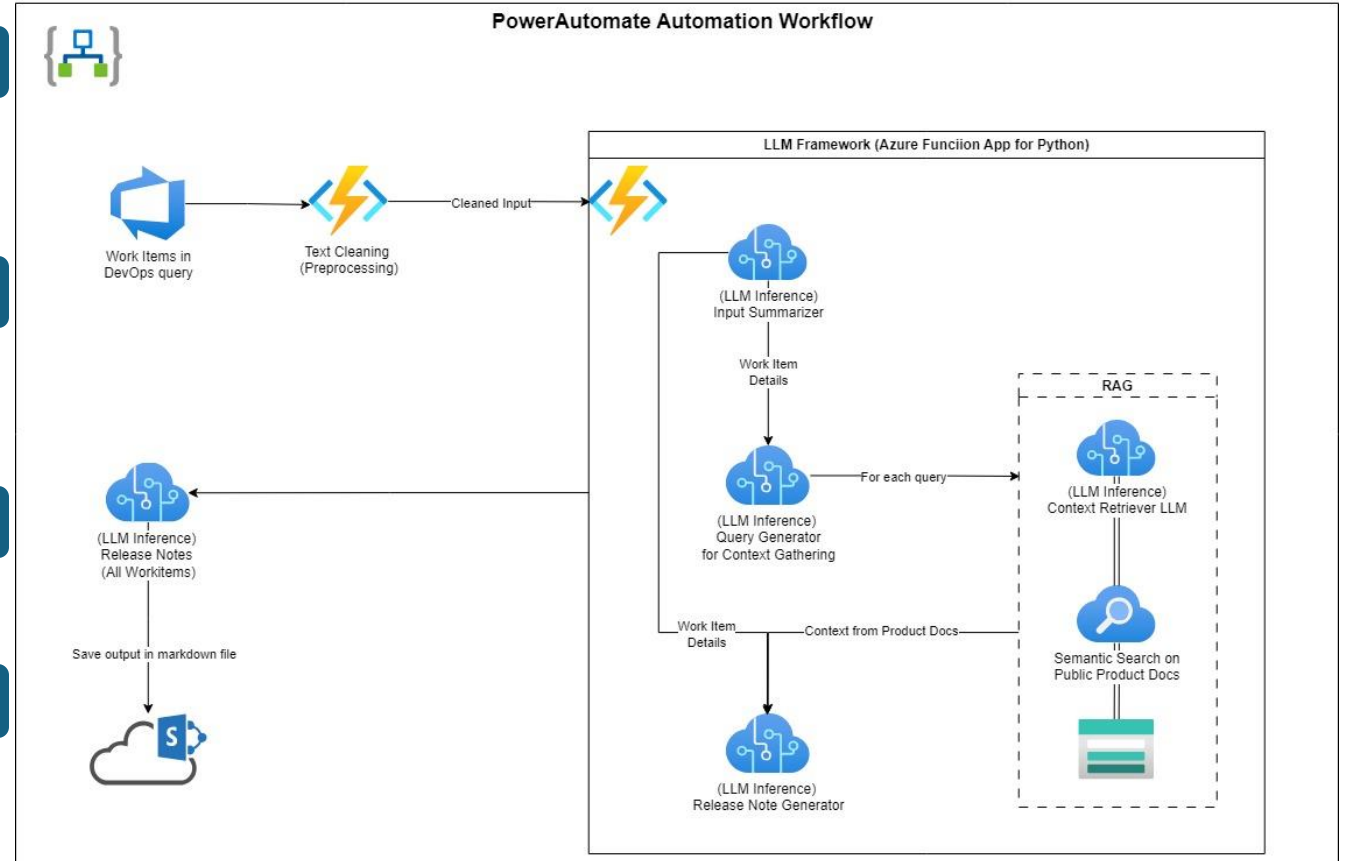
Resources

<u>Deployments</u>

Azure OpenAI Model Deployment (ICM-Enrichment-OpenAI - Microsoft Azure)

Azure AI Search Deployment (tkishnani-search - Microsoft Azure)

Backend | Azure Durable Function App (README.md - Repos)

<u>Links</u>

Automation Workflow: https://make.powerautomate.com/environments/e6b57504-e65e-404c-9456-d5292412f309/flows/shared/18e4ac82-dace-4a57-bfb1-68a387f33fb2/details

AI Generated Release Notes (Omnichannel Team - Release Note Generation - All Documents)

Published (Microsoft Dynamics 365 Omnichannel/Unified Routing - Update 24115 - Release Notes | Microsoft Learn)

Demo Video: AI Generated Release Notes Demo.mp4