# Let's go cisco live! #CiscoLive

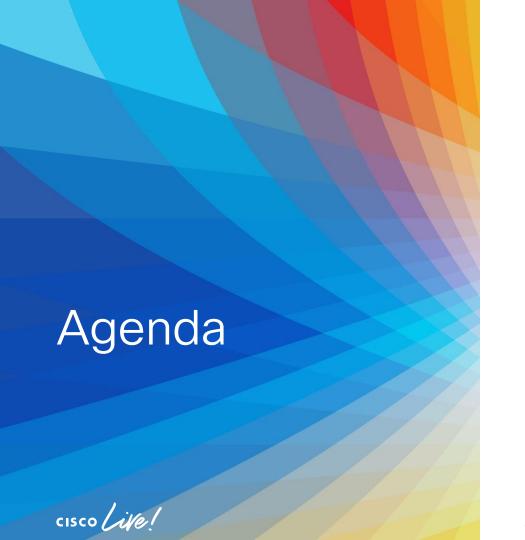


## ECE Email Routing Walkthrough

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TACCOL-2001





- Introduction
- System Overview
- Logging Basics and Configuration
- Email Flow
- Conclusion

#### Introduction





#### Enterprise Chat and Email (ECE)



ECE provides routing for multichannel contact centers



Email routing contains workflow routing with the ability to send auto-replies and route emails to the correct agent based on multiple factors



Chat features allow embedded chat forms in customer websites with routing to agents



Web Callback/Delayed Callback provides capabilities for customers to receive calls from an agent through CUCM



#### System Overview



#### Deployment Types

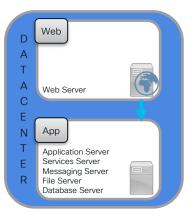
ECE uses reference designs for deployment

Two general deployment types

- 400 Agent or Coresident
- 401+ Agent or Fully Distributed

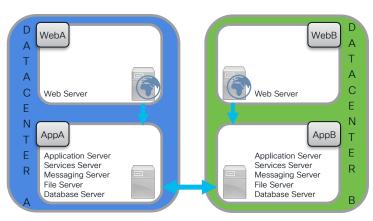
Starting with version 12.0 each of these support high availability or geo-redundancy

ECE 12.6 ES3 introduced new 2500 agent deployment model with updated OVAs



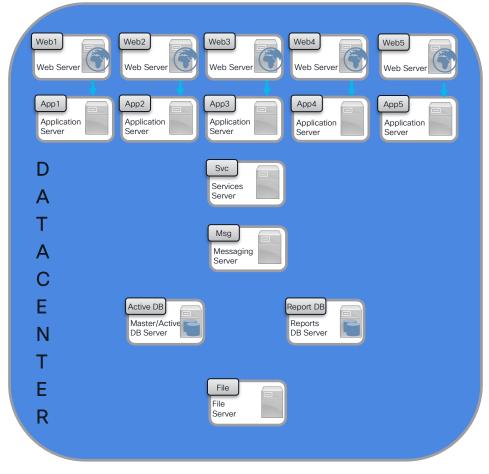
Deployment Options

400 Agent Standalone

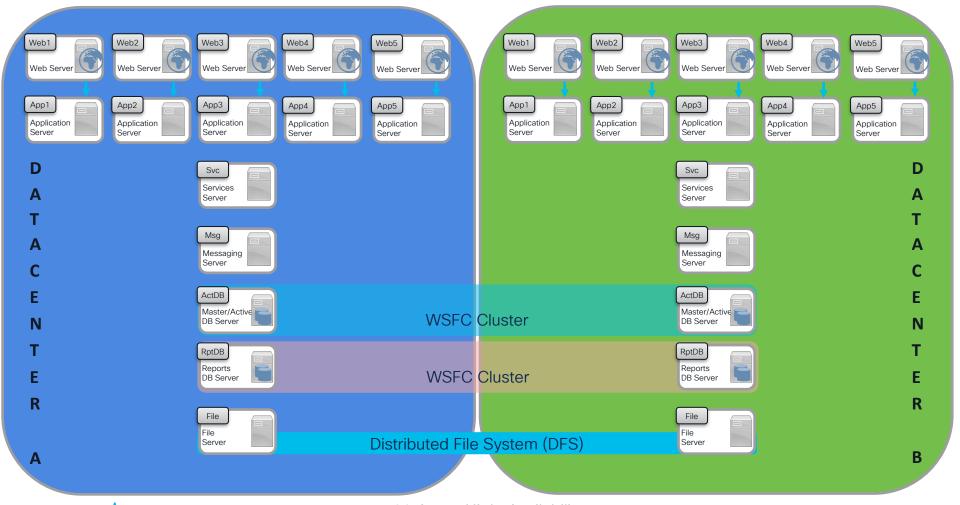


400 Agent High-Availability



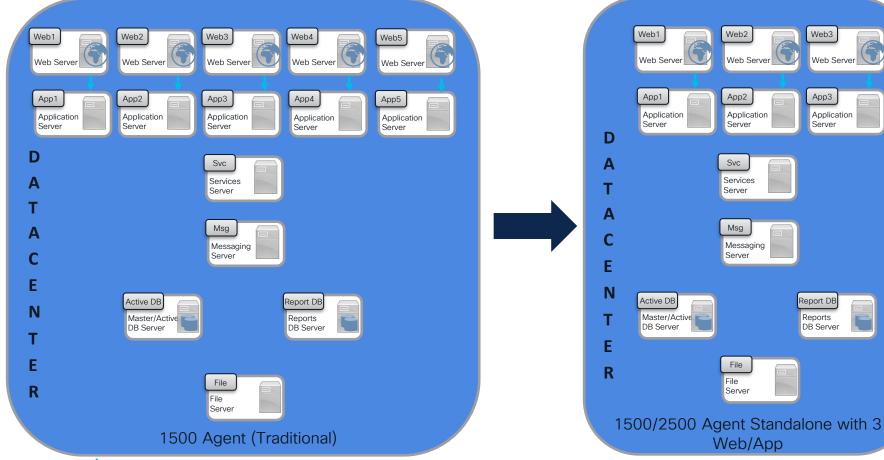


1500 Agent Standalone





#### 1500 Agent Deployment Option (non-HA)





Web3

Арр3

Server

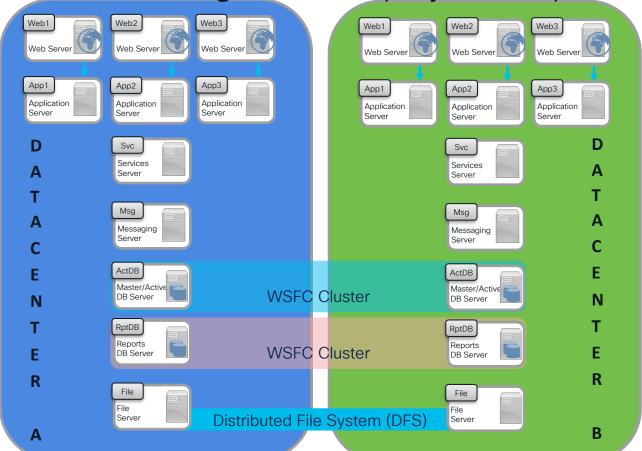
Report DE

Reports

DB Server

Application

#### New 2500-Agent HA Deployment Option





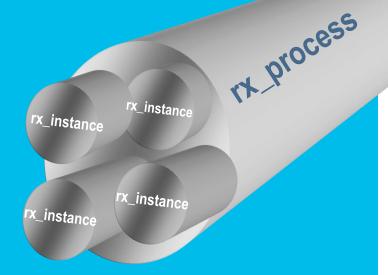
#### **ECE Process Terminology**

Term	Role/Context	Notes
External Agent Assignment Service (EAAS)	ECE process the MR PIM communicates with	Sends ECE Queue route requests to CCE via PG
External Agent Messaging Service (EAMS) - <i>Listener</i>	CTI Link to Agent PG CTI Server - CTI = ARM	You'll configure Agent Routing Management (ARM) on the Agent PG
Retriever	Retrieves emails for ECE	Uses POP or IMAP, secure
Dispatcher	Sends emails for ECE	Uses SMTP or secure
Workflow	How contacts are assigned to ECE queues	You'll set up workflow rules to determine "what" goes "where"



## Process and Instance Relationship

Allows line of business control of instances without impacting others



#### Service Processes

- Run on the Services Server
- Perform specialized system functions
- Support one or more instances

#### Instance

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- Is a derivative of a service process
- May have specific mappings

   e.g. Mail aliases are mapped to an RX-instance.
- Must be assigned to a single Process

## Logging Basics and Configuration



#### Process Logs

- ECE Logs are always located on the server where the process is running
- ECE 12.0 introduced a change which affects where the logs are in a collocated deployment

- Logs are written at the process level
- Multiple instances are written to the process log in sequential order
- The latest log can be identified using .log extension
- Old file are renamed as .log.x

#### Log Locations

#### ECE Logs are in different places based on the deployment model chosen

#### 400 Agent

- Standalone
  - Install Logs: <ECE\_HOME>\eService\logs
  - Process Logs: <ECE\_HOME>\eService\_RT\logs
- Georedundant (HA)
  - Install Logs: <DFS\_SHARE>\eService\logs
  - Process Logs: <ECE\_HOME>\eService\logs

#### 1500 and 2500 Agents

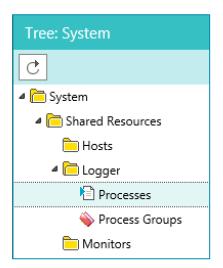
- Install Logs
  - File Server: <FS HOME>\eService\logs
  - Components: <FS\_HOME>\eService\installation\logs
- Process logs
  - <ECE\_HOME>\eService\logs

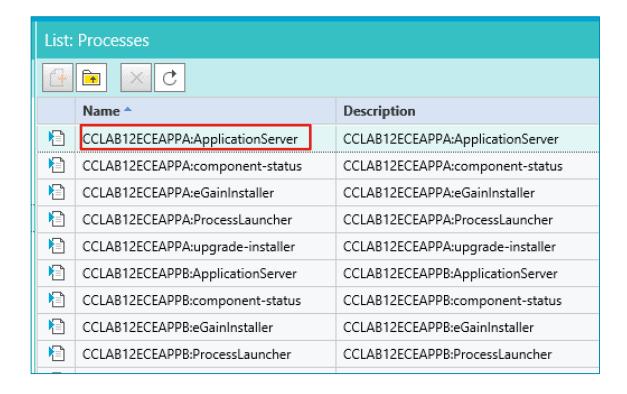
```
<ECE_HOME> = Installation directory

<DFS_SHARE> = DFS UNC path

<FS_HOME> = File Server home directory
```

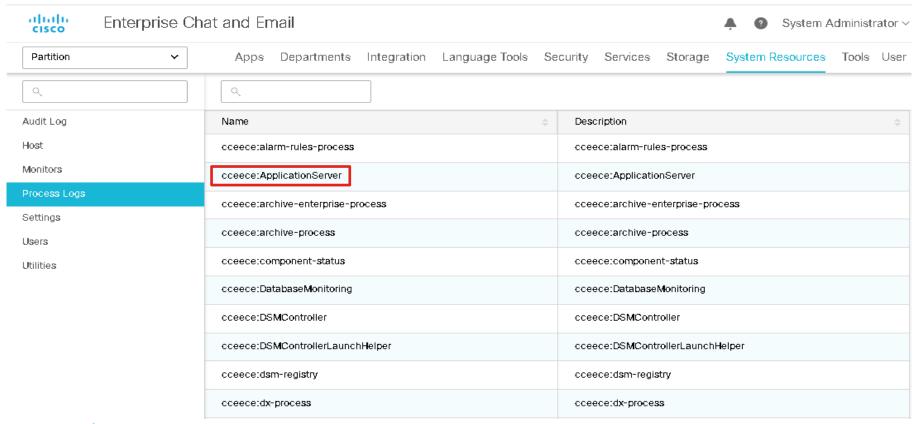
#### Logging - Partition 0 - Process list







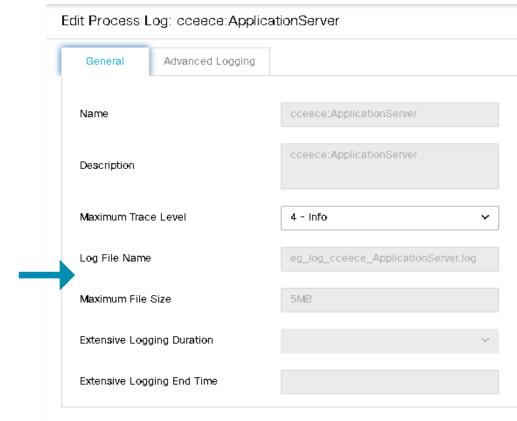
#### Logging - Process list





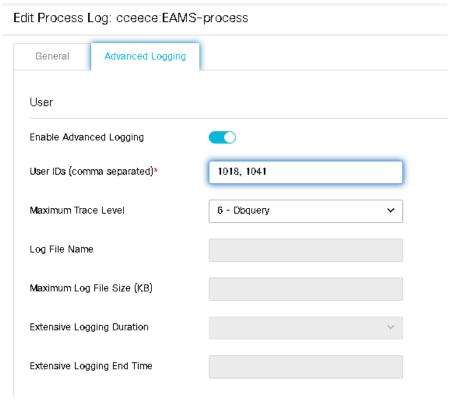
#### Log Properties - General Tab

- Log file name this will be the format of the file name on the server
- Extensive logging duration only required for trace level
   7 or higher
- Trace level returns to level set before extensive tracing





## Log Properties – Advanced Logging



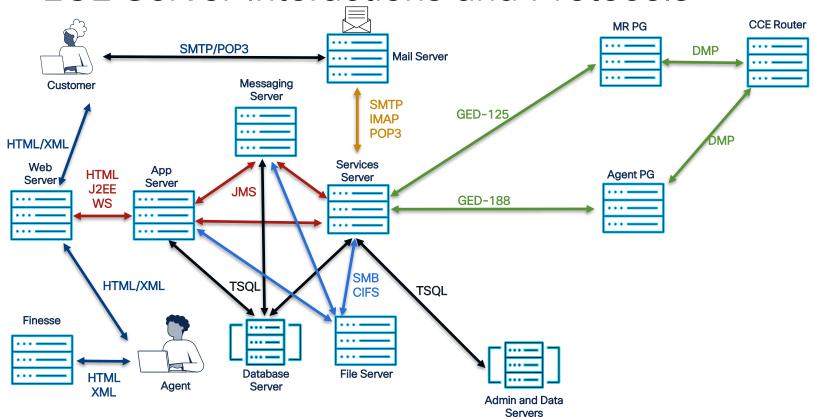


#### Email Flow





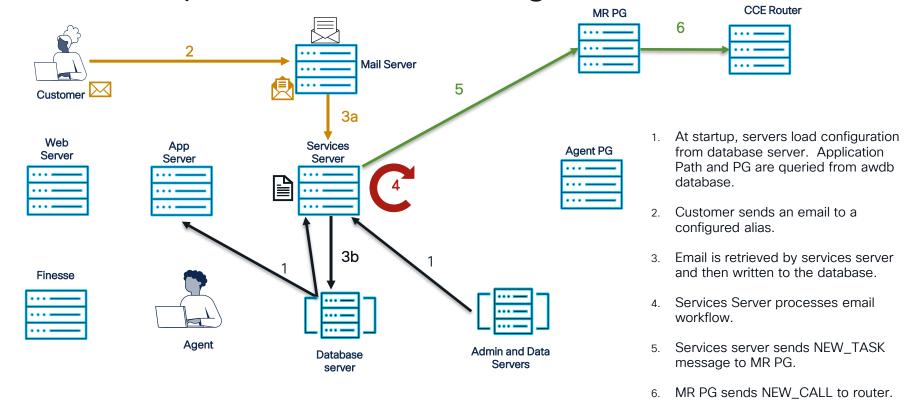
#### **ECE Server Interactions and Protocols**





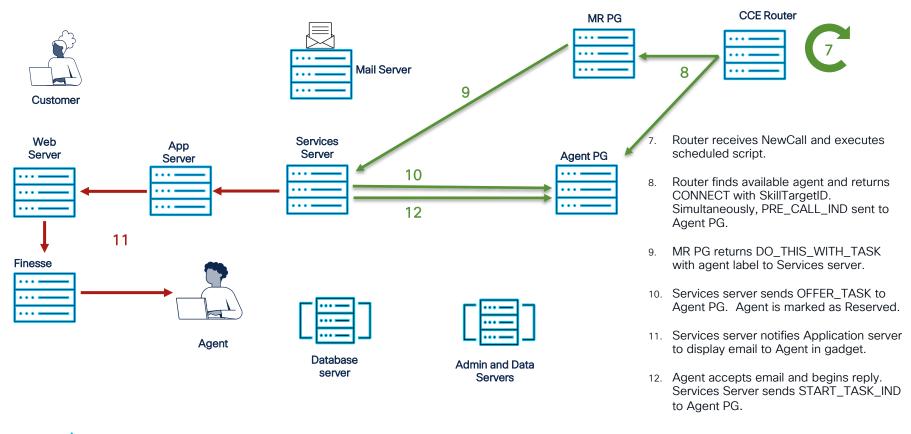
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#### ECE Component Email Message Flow



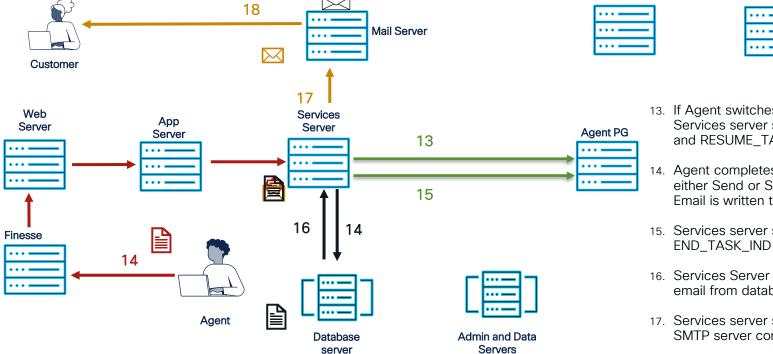


#### ECE Component Email Message Flow





#### ECE Component Email Message Flow





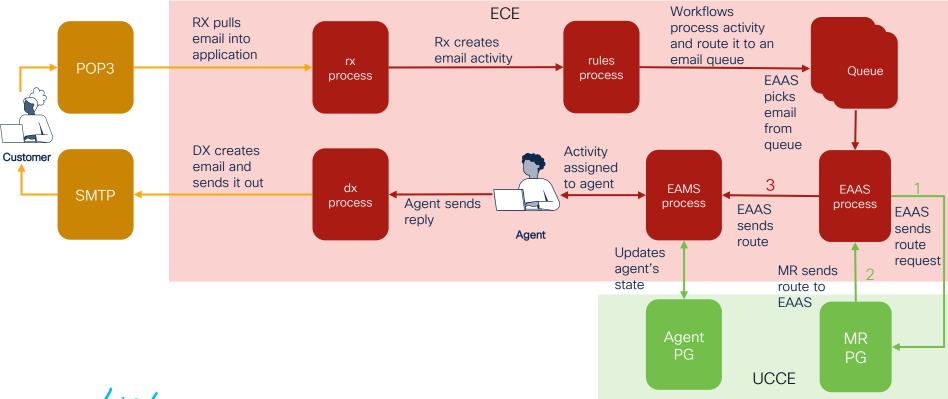
MR PG



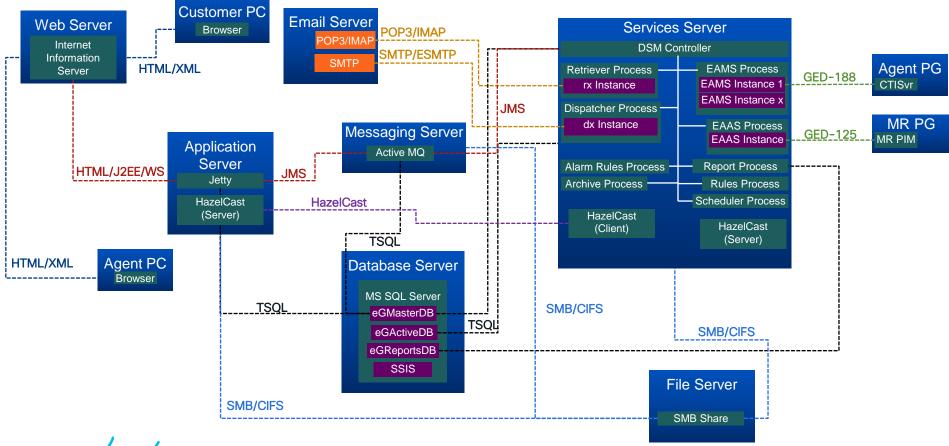
- 13. If Agent switches to another task, Services server sends PAUSE TASK and RESUME TASK to Agent PG.
- Agent completes reply, then clicks either Send or Send & Complete. Fmail is written to the database.
- 15. Services server sends END\_TASK\_IND to Agent PG.
- 16 Services Server creates outbound email from database.
- 17 Services server sends email to the SMTP server configured for alias.
- 18 Mail server sends email to customer.



#### ECE eMail Logical Process Flow

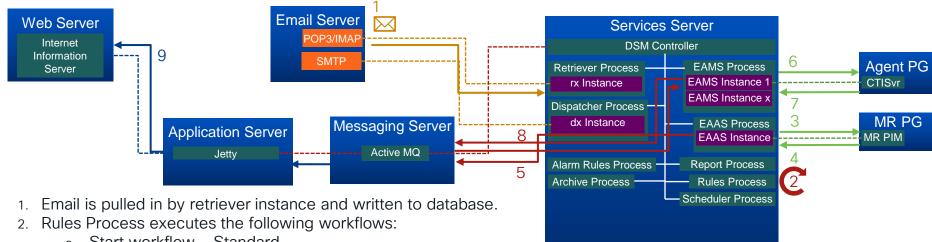


#### ECE Inter-process Communications and Protocols





#### Email Process Flow (Abbreviated)



- a. Start workflow Standard
  - b. Scheduled, active workflow for Alias
- 3. EAAS Instance sends NEW TASK message to MR PIM.
- MR PIM returns DO\_THIS\_WITH\_TASK to EAAS with AgentID.
- EAAS notifies EAMS of DO THIS WITH TASK.
- EAMS sends OFFER TASK IND to CTI Server.
- CTI Server responds with OFFER TASK EVENT to EAMS.
- EAMS publishes activity and agent details to ActiveMQ on Messaging server.
- Application server displays email to Agent with notification.



**Database Server** 

MS SQL Server

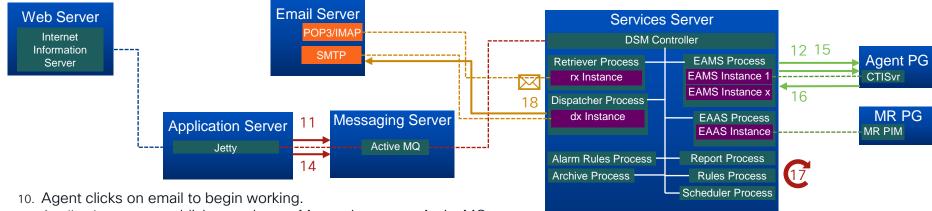
eGMasterDB

eGActiveDB

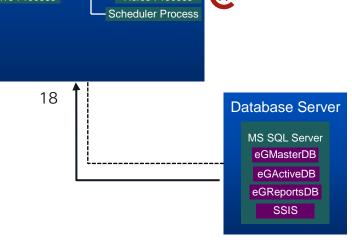
eGReportsDB

SSIS

#### Email Process Flow (Abbreviated)



- 11. Application server publishes update to Messaging server ActiveMQ.
- 12. EAMS sends START TASK IND to CTI Server.
- 13. Agent finishes reply and clicks Send and Complete.
- 14. Application Server publishes update to Messaging server ActiveMQ.
- 15. EAMS sends END\_TASK\_IND to CTI Server.
- 16. CTI Server sends END\_TASK\_EVENT.
- 17. Rules process executes any scheduled active outbound workflows (not common).
- 18. Dispatcher Instance pulls email from database and sends to SMTP server for alias.





#### Conclusion



#### Conclusion

- ECE adds multichannel capabilities to UCCE solution
- It can be integrated with UCCE, PCCE or HCS
- ECE supports High Availability option
- Solution supports up to 2500 agents with 12.6 ES3 onwards
- Reduced footprint with updated OVA templates



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Q&A

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### Thank you



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