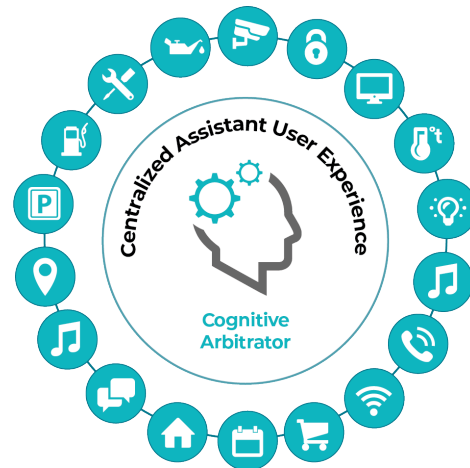# Cerence Cognitive Arbitration

Connected driving and enhanced brand connection... Delivered.

From smartphones to smart homes to services at work and in the wider world, today's drivers connect with an expanding variety of different devices and voice-enabled assistants.

The Cerence Cognitive Arbitrator enables your automotive assistant to seamlessly fold the users' preferred third-party AI into each car capabilities—all without compromising the privacy, security, or the integrity of your branded user experience.

Cerence developed our breakthrough AI-based technology to elevate Cerence Drive and solve one of the biggest challenges of connected living: the hassle of not only choosing which device to use and when to use it, but also remembering its specific capabilities and vocabularies.

Our Cognitive Arbitrator makes this easy by integrating third-party intelligence with your own in-vehicle systems to create a connected ecosystem controlled by you.

- Preference learning
- Contextual reasoning
- Explicit and implicit understanding
- Omni-service execution
- An undiluted user experience

Centralized Assistant User Experience

Cognitive Arbitrator

Drive your brand forward with Cerence Cognitive Arbitration

AI for a World in Motion

Cerence Cognitive Arbitration

Your interface, your way.

Fully integrated into Cerence's centralized AI within Cerence Drive, the Cerence Cognitive Arbitrator brings an expanded level of intelligence to the connected car HMI and comes fully scaled and customized to your needs.

PREFERENCE LEARNING AND CONTEXTUAL REASONING

Cognitive arbitration enables your automotive assistant to remember a user's history, habits, and preferences—across all services. It can then adapt accordingly using on contextual commands, like "Play my new audiobook." or "Cancel my last order."

EXPLICIT AND IMPLICIT UNDERSTANDING

Whether the request is specific ("Ask Spotify to play some jazz.") or just implied ("Play my favorite song."), cognitive arbitration allows your assistant to connect the dots and provide the notes.

OMNI-SERVICE EXECUTION

Multiple services? Complex, nuanced requests? No problem. Our Cognitive Arbitrator allows your assistant to integrate with many agents together to complete complex tasks, such as "Cancel my grocery delivery if the weather is going to be nice next week."

UNDILUTED USER EXPERIENCE

With Cerence, you can give your customers access to their favorite third-party services without interrupting their connection to you—or by complicating the in-car experience.

Our Cognitive Arbitrator in action

Consider the following possible user requests while driving and what the Cerence Cognitive Arbitrator does with each:

"Give me directions to the closest gas station that sells diesel."	The Cognitive Arbitrator decides that the native in-car assistant is best equipped to handle the request.
"Invite Joe to my 11 a.m. meeting."	It identifies a calendar request and connects to the office suite assistant.
"Hey, Alexa, turn off the lights."	It knows this for Alexa and is connected to the user's smart home. So, It sends the request to turn off the house's lights, not the car's.
"Make sure to record the game tonight."	It recognizes this is entertainment related and refers the request to the in-home TV assistant.
"What's my checking account balance?	It understands this is related to the user's bank and routes the request to the bank's intelligent VA to process it.
"I'd like Chinese food when I get home."	The Cognitive Arbitrator forwards the request to a meal delivery service, selecting the user's favorite dish (nothing too spicy, please). It can also schedule the delivery using the in-car navigation to calculate the arrival time.

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