



## **W3C Automotive Working Group**

Gen2 RPC – Scope and Requirements



- **Introduction [10 min]**  
Round-table intro. Reason behind RPC. Outcome
- **Define RPC boundaries [25 min]**  
Purpose. Call types.
- **RPCs vs Pub/Sub [10 min]**  
Understand when to use which mechanism
- **Security [15 min]**  
Per-call/session/server credentials?
- **Interface Definition Languages [20 min]**  
FrancaIDL, YAML, other? Scalar vs. composite data types.
- **Gauge interest / Next Steps [10 min]**  
Tentative agreement on if we need RPCs or not, and how to proceed

# Remote Procedure Calls

## DEFINE RPC BOUNDARIES [25 MIN]

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- **Purpose**  
Integrate BYOD. Remote Access. Third-party apps. More?
- **Call types**  
Fire and forget. Request / Reply. Robustness
- **Argument and return types**  
Scalar, Composites, Enums
- **Service Discovery**  
Build-time, startup-time, dynamic
- **Service Grouping**  
Namespace several calls in a single service

# Remote Procedure Calls

## RPC VS. PUB/SUB [10 MIN]

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- **RPC to actuate and change. Signals to sense and report**  
Is there a better strategy?

# Remote Procedure Calls

## SECURITY [15 MIN]

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- **Session Authentication**  
Certificate based?
- **Role-based security?**  
Authentication is for user. User is mapped 0-N roles.  
Service is authorized to roles, not users.  
Align with VSS security?
- **Service Discovery Filtering**  
Only show services that client is authorized to invoke.

# Remote Procedure Calls

## INTERFACE DEFINITION LANGUAGE [20 MIN]

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- **FrancaIDL, YAML?**  
Available tooling. Decoupled from implementation / frameworks.

# Remote Procedure Calls

## GAUGE INTEREST / NEXT STEPS [10 MIN]

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- **Who needs this?**
- **What do we need to focus on?**
- **Next steps?**

THANK YOU

