



Minimum Conditions for APAC SWIM Operationalization

David Leow
8 May 2025

Introduction

- Need an agreed end-point for SWIM development.
- Every state and organization has different requirements / needs for APAC SWIM
- The SIPG cannot continue indefinitely on SWIM trials alone.
 - Need an agreed set of conditions upon which the SIPG can declare the APAC SWIM TI as complete and operational
 - Need a clearly defined goal towards which we can work.
- Need an agreed method for determining the readiness of APAC SWIM for operational use.

Items to be considered

- SWIM Architecture
 - Not every state in APAC is connected to the CRV.
 - Not every states in APAC is ready to join in the APAC SWIM in the next couple of years
 - Is it enough to form the GEMS layer to consider APAC SWIM Operational?
 - Guidance material on EMS configuration?
 - Guidance material on GEMS on-boarding?
- SWIM Security
 - What kind of security mechanism is acceptable?
 - Initial phase to use self-signed certificates
 - To role out new infrastructure according to TFP recommendations once the guidance has been published
 - Expected to be PKI based.
 - Must the TFP recommendations be fully adhered to or are we able to accept a partial implementation?

Items to be considered

- SWIM Governance
 - Registry Management
 - Propose for every EMS provider to have 1 Registry
 - Every Edge EMS to exchange registry info with its connected Gateway EMS
 - Every Gateway EMS to exchange registry info with all other connected Gateway EMS
 - Identity and Access Management (IAM)
 - Each EMS provider needs to establish its own IAM mechanism.
 - Need a way to establish trust between different IAMs
 - Trust Framework Instance?

Information Services

- SWIM TF 9 / WP 16 Appendix A lists a set of agreed common information services
 - Broken down into 4 categories
 - APAC Common SWIM Aeronautical Information Services
 - APAC Common SWIM Flight Information Services
 - APAC Common SWIM Meteorological Services
 - APAC Common SWIM Surveillance Services
 - Should the implementation of all of these services be a required condition for APAC SWIM?
 - Proposal: Implement services for FF-ICE Release 1.