E-Government Interoperability Reference Architecture

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Better Uganda

- Motivation from •
 - National Vision 2040
 - Digital Uganda Vision







Ugandan Interoperability Framework (e-GIF)

Common approach to deliver public services.

Contains: interoperability guidelines as:

- Principles
- Models
- Recommendations



Architecture

The fundamental concepts or properties of a system in its environment embodied in:

- its elements,
- relationships,
- and in the principles of its design and evolution





Government Interoperability Reference Architecture

Architecture content metamodel defining key architectural building blocks (ABBs).

Common terminology for various architecture and system development tasks in MDAs.







Motivation

- Better Uganda through
 - Achieve Interoperability through
 - Legal interoperability
 - Organisational interoperability
 - Semantic Interoperability
 - Technical interoperability





Using GIRA... Design solution architecture for integrated public service



Benefits

- Providing the key interoperability enabler Architectural Building Blocks
 - Identifies concernes that must be addressed by coordinating entity.
- Controlled Vocabulary
 - Common language
- Decoupling functionalities in Architectural Building Blocks
 - Better rationalisation and reusability
- Facilitating the identification of Interoperability Specifications
 - Specifying "standards" to follow
- Accelerating the development cycle
 - Think in "services" and "cooperation"
- Supporting portfolio management decision making
 - Visible portfolio allows adjustments
- Supporting public policy formulation
 - Create checklist for policy and legal changes to ensure interoperability.









Target Audience

- Architect for building solution architecture
- Business analyst understand and assess impact of changes in large scale
- Portfolio manager making investment decisions on egovernment solutions



GIRA Deliverable

- Delivered as ArchiMate model
- Model is exposed using views
- Better to navigate views using Archi
 - [https://www.archimatetool.com/]
- View: A representation of a system from the perspective of a related set of concerns
- Viewpoint: A specification of the conventions for a particular kind of architecture view

Views

- GIRA viewpoints
 - E Conceptual Model for Integrated Public Service Provisioning viewpe
 - GIRA Interoperability Privacy viewpoint
 - Highlevel viewpoint
 - Interoperability Governance viewpoint
 - Interoperability Privacy viewpoint
- Interoperability Security viewpoint
 - Interoperability Specification viewpoint
 - Key Interoperability Enablers viewpoint

Ontology viewpoint

- Application view
- Architectural Principles view
- GIRA infrastructure
- E Legal view
- Organisational view
- Semantic view





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How to Read?

- Building Block
- GIRA views and viewpoints
- e-GIF reqirements
- Principles
- Solution Blocks



High-Level analysis of a target digital public service

Benefits Are Achieved Only When GIRA is Used!



GEA Implementation and Transition Plan

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Segmentation

Example: Timestamp service

example:etu and **PKI** infrastructure

Real Property lies Accelerations And American Drampt Business: Mander E. Management. Summer of the 10 March 1997 Personal terres. No. of Concession, Name Sec. 4 No. 1999 Million . Balins And in case of the local division in the loc Segment architecture m Example: citizen portal





Layered

- **Baseline description**
- Target architecture
- Proposed action plan

Legal view **Business Architecture** Organisational view Data architecture

Application and technical architecture





Different Actions



One time / NITA-U

Reoccurring / NITA-U

 Legal improvements and monitoring





Questions...

... to ask yourself after getting familiar with GEA/GIRA/WASA/I&T Plan:

- What I need to do next?
- What others (NITA-U, MDAs etc.) are doing? How can I benefit from it?
- Do I have the resources to commit (business continues)?





Let's make digital transformation happen! In Uganda!

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