

Space Assigned Numbers Authority



Marc Blanchet
Viagenie/SANA

<http://sanaregistry.org>

info@sanaregistry.org

marc.blanchet@viagenie.ca
<http://viagenie.ca>

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Description



- Need to create protocol parameters registries for space telecommunications protocols.
- Space Assigned Numbers Authority (SANA)
 - Created by the CCSDS Yellow Book #313
 - Inspired from the Internet Assigned Numbers Authority (IANA, iana.org) but with CCSDS/Space/Agencies specifics.
 - Service to the space data systems standards community

Why Registries?



- Single place for protocol parameters
- Managed assignments of protocol parameters
- Guarantees uniqueness
- Enables multiple sources of assignment requests:
 - From one or multiple standards documents
 - From space agencies
 - From other organizations (if permitted)
- Assignment policy defined by the working group creating the registry

Registry Examples



- Spacecraft ID
 - Created prior to SANA existence. Managed by WDC.
 - Each spacecraft has a unique ID
 - ID is used in protocol frames to reference the spacecraft.
 - Registry guarantees uniqueness

Registry Examples



- XML Registry for CCSDS/Space
 - Namespaces:
 - urn:ccsds
 - Registered namespace guarantees the tree is dedicated to CCSDS protocols.
 - Sub-tree will be managed by SANA on behalf of CCSDS
 - Schemas:
 - Registry enables applications to get the latest version of the schema.
 - Versioning in the registry enables applications to use a specific version of the schema when needed.

What's next?



- Need for an assignment or new registry for space data systems protocol parameters?
 - Go to <http://sanaregistry.org>
 - Verify if the registry exists
 - If yes, then read the registration policy and proceed as required
 - If no, then write a CCSDS document describing the need for a registry.
 - Ask help at <mailto:info@sanaregistry.org>