Data Types

RADEXT - IETF 87

Data Types

- RADIUS has data types?
- Explicitly named and defined in 2865
 - text, string, address, integer, time
- Used in dictionaries since Livingston 1.0
- ATTRIBUTE User-Name 1 text

What's missing

- No other RFC named and defined data types
- 3162 "Address" is IPv6
- 2869 Event-Timestamp is time, but not "date"
- 6572 defines IPv4 prefix, but not as a data type
 - And doesn't refer to 6158. Why?
- Extended attrs defines multiple data types, and names them

What do to about it

- Define the data types in new document
- Changes two things:
 - IANA registry
 - Specification format

New Registry

- RADIUS Data types
 - Value integer, only for IANA tracking
 - Description name (disambiguated)
 - Reference (RFC, etc.)

Mod Attribute Registry

- Add "data type" column
- Reference to "Description" field of RADIUS data type registry

Benefits

- It now becomes possible to generate RADIUS dictionaries directly from the IANA registry
- Data types are explicitly enumerated
- Data types have their formats explicitly given
- Specifications can probably avoid ASCII art

Downsides

• None?

Next Steps

- Accept as WG document
- Publish as Standards Track
- Start using data types in new specifications

Discussion?