Data Types

RADEXT - IETF 86
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?