# RADIUS Design Guidelines

http://www.ietf.org/internet-drafts/draft-ietf-radext-design-02.txt

Alan DeKok (Ed.) FreeRADIUS

### Introduction

- Guidelines for the design of RADIUS attributes
- For authors and reviewers of specifications
  - Vendors
  - SDOs
  - IETF
- Should help avoid historical design issues
  - Inter-operability, gratuitous data model changes, etc.
- -03 is in progress

### **Changes since -02**

• Minor clarifications as per reviews on the list

#### Need feedback

- What are the assumptions of RADIUS?
- Can we articulate them?
  - Sweep the issue under the rug?
  - Assume everyone knows the assumptions?

### **Discussion**

- Anything else?
  - (Presentation has more slides... same as IETF 70)
  - Not needed here.

### **Data Model**

- Overview of basic data types in RADIUS
- Tagged types
  - NOT RECOMMENDED for future use
- Use of complex data types
  - For security and authentication only
  - All other uses NOT RECOMMENDED
- Security implications of complex types

IETF 71 5 DeKok

#### **Data Model Issues**

- Vendor Space considerations
  - Interoperability is a Good Thing
  - Vendor allocations: not from standard space
  - SDO allocations: not from standard space
- Publication of specifications
  - Is RECOMMENDED
  - IETF process is not necessary for many specifications
- Polymorphic attributes
  - NOT RECOMMENDED

### **Appendix A**

- Types matching current data model
  - Simple / extended / complex types enumerated
- Improper data types
  - Simple / complex types enumerated
- Vendor-Specific formats (good / bad)
- New functionality: what not to do
- Allocation of attributes
  - use VSA space for most new allocations.

IETF 71 DeKok

## **Appendix B**

- Discussion of existing attributes
- Why they satisfy the design criteria
  - Or why they don't

#### Discussion?

- Is the draft missing anything?
- Any historical practice that should be mentioned?
  - Can be RECOMMENDED
  - Can be NOT RECOMMENDED