Non-uniform Namespace Issue

Alternatives for Issue 46

The Basic Issue

- Uniform Namespace is important
- Everybody wants a uniform namespace
  - Except when they don't :-(
- Typical example is /usr/bin
  - People want different ones based on cpu
  - Or type and version of OS
  - Or compiler version

Alternatives

- Say "Go away. Don't bother me".
  - Make it a client problem
  - But people really want this
- Make different /usr/bin's into replicas
  - With user-defined attr's to select
    - Replicas with different data is stretching it
    - Possible explosion of replica's
- Single replica name with substitution

Replica Name Substitution

- For particular components,
    - Direct client to replace by attribute value
    - e.g. CPU
    - Issue of concatenating text or other attrs
        - Just say "No".
    - Need an encoding convention
        - Leading zero bytes
        - UTF8 character in top billion
- Will typically bring you to a further referral
    - Can route to multiple server replicas at that point