“State of the Consortium”

November 3, 2008
Stephen C. Buckley
Executive Director
Goals of the Kerberos Consortium

➢ Provide leadership to the world community
➢ Establish Kerberos as a universal authentication mechanism.
➢ Make Kerberos appropriate for new environments.
➢ Enable Kerberos across a plethora of endpoints.
➢ Help developers integrate Kerberos.
Goals of this Meeting

- Report back on year one progress.
- Establish priorities for year two
Board Members

- Jordan Hubbard, Apple
- Slava Kavsan, Microsoft
- Wyllys Ingersoll, Sun
- Paul Armstrong, Google
- Wilson D’Souza, MIT
## 20 Sponsors

<table>
<thead>
<tr>
<th>Apple</th>
<th>MIT</th>
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<tr>
<td>Carnegie Mellon</td>
<td>Michigan State</td>
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<tr>
<td>Centrify Corporation</td>
<td>NASA</td>
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<td>Cornell</td>
<td>Pennsylvania State</td>
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<td>The United States Department of Defense</td>
<td>Stanford</td>
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<td>Duke University</td>
<td>Sun Microsystems</td>
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<td>Google</td>
<td>TeamF1, Inc.</td>
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<td>Iowa State</td>
<td>University of Alaska</td>
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<td>Microsoft</td>
<td>University of Michigan</td>
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New Team Organizational Structure

ED5
Buckley

DM4
Yu

SA5
TBH *

P4
Raeburn

P4
Tsikova *

P3
Ellwood

P4
Hudson *

P3
TBH *

* = New
Board Priority: Huge Doc Push

- “The Role of Kerberos in Modern Information Systems”
- “The MIT Kerberos Administrator's How-to Guide”
- “Best Practices for Integrating Kerberos Into Your Application”
- “Why is Kerberos a Credible Security Solution?”
- “Recommended Practices for Deploying & Using Kerberos in Mixed Environments”
Board Priority: Database Support

- KC recruited summer intern
- MySQL recruited Google SOC student
- Working to make Kerberos authentication to MySQL a priority
- KC offered resources
  - Students
  - Design and architecture expertise
  - Documentation and “Best Practices”
Board Priority: Coding Practices

• Significant progress in style and process (opened up on Kerberos wiki)
• Selected and purchased Coverity static analysis tool.
• Hired experienced C programmer to be "code czar"
• Better team code review
• Source code browsing tools
Board Priority: Good Test Suite

• GSS Monger received under Microsoft Permissive License.
• Test Engineer hired with start date of Oct 1, 2008
• Microsoft agrees to take MIT’s changes
• Needs: UNIX version
Strategic Pillar: Kerberos on Mobile

- “It’s all about the battery”
- Reduce disk and in-memory footprint.
- Working with Apple
- Significant progress on “Kerberos Lite”
- Presentation later today.
Strategic Pillar: Maintaining & Securing

• Adopt realistic solutions to security weaknesses
• Adopt technologies that encourage others to extend Kerbereros and use it in new ways
  – Kerbereros Identity Manager
• Presentation later today
Strategic Pillar: Vendor Independence

- “Open Evolution”
- Links to documentation of extensions
- Goal of feature parity
- Help document and standardize
- Encourage code donation and relicensing
- Competition good
- Duplication of effort is generally bad
- Interoperability is key
Preliminary Goals for Year Two

• Kerberos Lite for Mobile and Embedded
• Kerberos 1.7
• Interop lab and interop event
• Kerberos’ role in the “Identity Metasystem”
• More docs: Wallet, GSS-API, “How to…”
• Simplified Host Config
• “Modularity”
Kerberos 1.7

- Incremental propagation support
- Removal of krb4 code
- Kerberos Identity Management (KIM) API
- Improved master key rollover / service key rollover
- Enhanced error messages for GSS-API
- Cross-platform CCAPI Windows
- Improved client-side referrals
- Domain_realm KDC-side referrals
- Collision avoidance for replay cache
- Logging of all ticket requests
- Implement MS protocol extention