


Exodus Communications, Inc.
User Authentication Requirements

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What Is Exodus?

- **Web hosting and co-location**
- **Internet backbone provider**

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What is Exodus?

- **Dynamic environment**
 - Everything and everyone is in motion
 - rapid growth
 - rapid change
- **Buy rather than build**

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Data Classification

- **3 levels (Public, Internal Use, Confidential)**
- **Several compartments (Engineering, HR, Strategic Planning, Financial, Security, ...)**

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Basic Facts - 1

**The notion of “security perimeter”
is rapidly eroding**

- **Core business functions are being outsourced**
- **Contractors are being brought in to provide support “within the building”**

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Basic Facts - 2

**Every data item owned by Exodus
is needed by someone
outside the “security perimeter”**

- **remote employees**
- **travelling executives**
- **customers**
- **partners**
- **contractors**

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Authorization Problem Factors

- **User Identity**
- **Data Identity**
- **Type of Connection**
 - **Link Protection**
 - **Platform Protection**

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Authentication Requirements - 1

Low Deployment Cost:

- **o(10000) users today (located everywhere)**
- **rapid user turnover**

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Authentication Requirements - 2

Low Management Cost

- Comparable to cost of managing passwords
- Implies extra hardware very inexpensive
(i.e. < \$10)

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Authentication Requirements - 3

Easily Portable

- Mobile users are the norm
- Some users use a variety of machines

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Authentication Requirements - 4

Easy Revocation

- **10000 issued to customers**
- **rapid turnover**
- **customer turnover may be discovered after the fact**

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Authentication Requirements - 5

Exportable from the US

- **Will surely use encryption**
- **Will be used by non-employees**

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Authentication Requirements - 6

Importable Where we do Business

- May even have to be used within company facilities (e.g. in PRC)

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Authentication Requirements - 7

- Scalable - to o(100000) users

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