

Advancing CALS to the WWW: The Agony and the Ecstasy

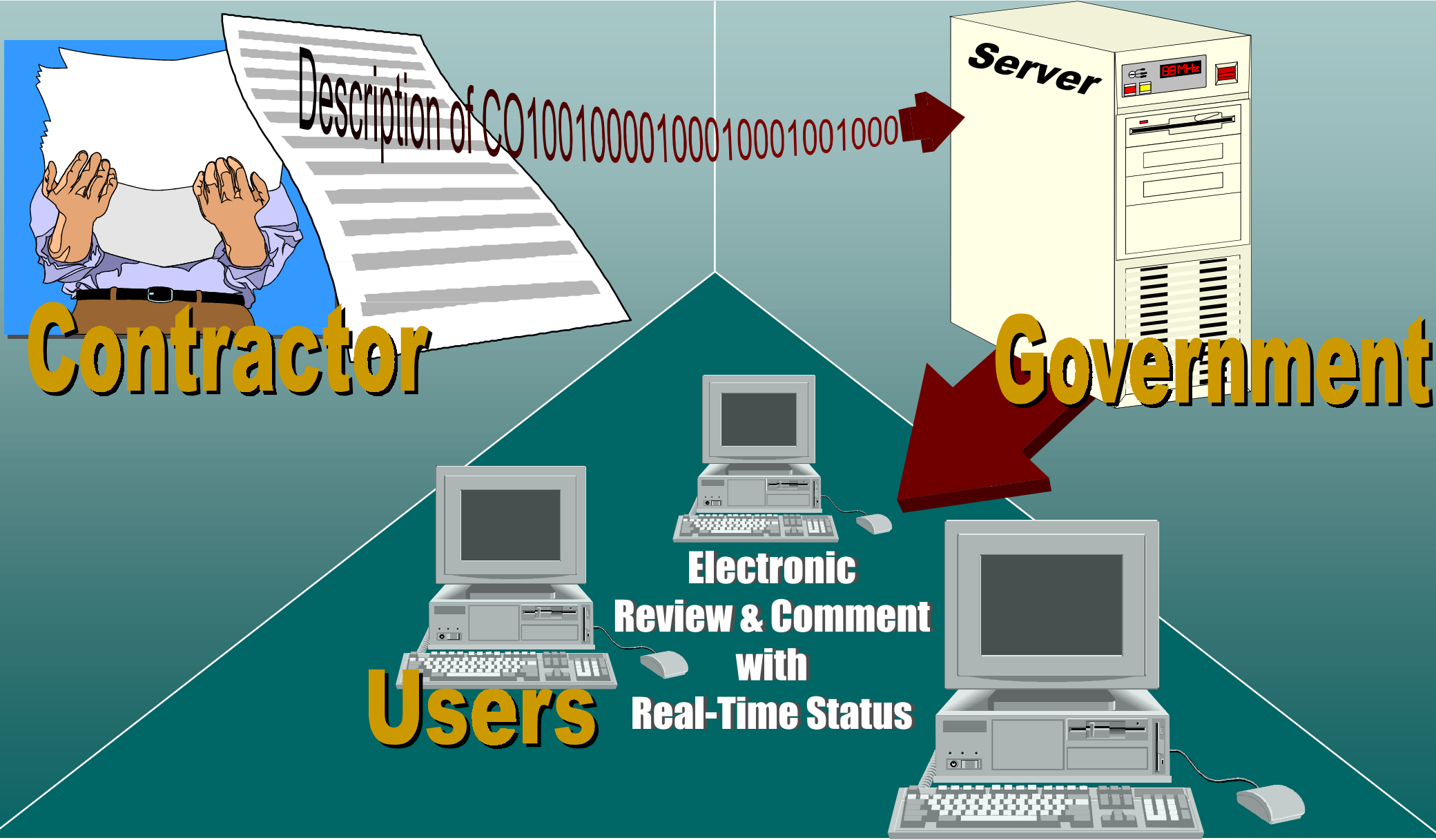
Jaimie Newcomb

MEARS Technical Lead

www.mears.redstone.army.mil

MEARS

Multi-User ECP Automated Review System



Description of CO10010000100010001001000

Server

Contractor

Government

Users

Electronic
Review & Comment
with
Real-Time Status

MEARS Background

Ecstasy

- Eliminate massive duplication of paper
- Utilizes CALS standards (SGML, CCITT group 4)
- Standard ECP/RFW format
- Government off-the shelf (GOTS)
- Saves money

Agony

- Cultural change
- Required network connectivity
- Forces use of standard as is



Why Web?



Ecstasy

- Seamless connectivity
- Hardware independence
- Simplified software updates
- Chat rooms and other cool stuff

Agony

- Web browsers behave differently
- Transferring data over a crowded network
- Little enforced standardization



SGML or HTML: What's the Deal?

SGML

- Data exchange standard for CALS and the mom of markup languages

HTML

- SGML simplified

wMEARS Design Decision

- SGML will continue to be delivery format
- Convert SGML to HTML in order to support legacy data

SGML Ecstasy

- It works
- No formatting applied

SGML Agony

- Limited availability of tools
- It can be complicated

HTML Ecstasy

- It is very easy to create
- Tools are easily obtainable

HTML Agony

- Static pages
- HTML standard is often altered by browser vendors



Security: Is It Ever Enough?

PRICE

- \$ Browser restriction - wide open to all users
- \$\$ Web site restriction - password protected access
- \$\$\$ Network restriction - Firewalls, intranet
- \$\$\$\$ Data encryption - SSL, certificates, PGP

Ecstasy

- More \$'s, more data is protected
- More \$'s, more protection from external attacks



Agony

- More layers you add, the more complex the site is to maintain

Keeping CALS Alive on the Web



- The ecstasy of managing your data on the WWW is
 - Functional simplicity
 - Ease of use
- The agony of CALS is
 - Behind technology
 - Too complex
- Keep CALS alive by
 - Adding new graphic formats
 - Release standards quickly