Cloud Computing for People with Developmental Disabilities

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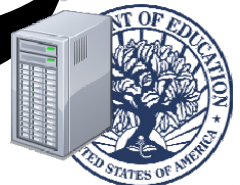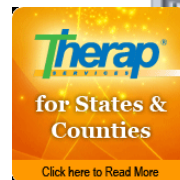
Outline

- What is cloud computing?

- Why does it matter?

- What is being done now?

- What are the further opportunities?

What is cloud computing?

Advantages for Users

- Access data and services from anywhere
- Very low cost... down to free
- Access services and content you could not have on your own computer
- Your computer can set itself up automatically to meet your needs and preferences:

  ☞*Autopersonalization*

How Autopersonalization Works

User profile in the cloud

...customizes presentation of Web page to meet user's individual needs

Modified browser accesses user profile...

Scenarios

- People can choose large fonts, preferred color contrast

- People can choose outline view of complex Web pages

- People with different needs and preferences can easily share a computer

- People can easily use public computers in libraries or community centers

Advantages for Developers

- Low barriers to entry

- Easier marketing and deployment

- Easier to make content and services inclusive

☞ *More and better services for users*

GPII

- Global Public Inclusive Infrastructure initiative
  – GPII.org
- $11M European Commission project launched November, 2011
  – Additional international matches

NIDRR Cloud Initiative

- NIDRR has funded work leading up to GPII for some years.

- It has been charged by the administration to lead a larger effort.

- NIDRR will continue to fund the development of the technology, in cooperation with the international projects.

NIDRR Cloud Initiative (cont.)

- NIDRR is planning joint activities with other agencies on:
  - Inclusive voting (National Institute on Standards and Technology, NIST)
  - Accessibility of federal cloud applications (NIST)
  - Inclusive educational assessement (Office of Special Education Programs)
  - Accessibility information for online educational content (Office of Education and Technology)
  - Strategic research (National Science Foundation)

Further Opportunities

- Current plans focus on cloud-based enhancement of access to content and services

- There are other cloud opportunities:

  - Use data from cloud-based systems to improve services

  - Provide consumers access to their own information, as in Blue Button service

  - Support experience sharing for technology consumers

  - Create an inclusive community of disability researchers and consumers

A Word of Caution

- cloud technology will not solve all of our problems
- there is a risk of exaggerated expectations and mistaken resource allocations
  - parallel: technology in the schools
- success with technology requires investment in people and their skills
- we need to grasp the real opportunities of the cloud, but with a sober sense of reality

Your thoughts?

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