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# **FAMILIES AND CHILDREN TRACKING SYSTEM DISCONNECTED COMPUTING**

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**Session 4-2**



# DISCONNECTED COMPUTING

## West Virginia's Context

### Core Principles

- Facilitate the capabilities and enhance efficiencies of a mobile workforce
- Develop companion approaches and devices
- Develop the ability to tailor the approaches to specific job functions
- One size does not fit all
- Create a menu of options
- Allow staff flexibility to select the option(s) that best integrates with their work process



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- ✦ **Menu of Options to Enhance Mobility**
  - ✦ Transitioning the client/server application to the Web
  - ✦ Speech recognition software
  - ✦ Voice recorders that interact with the speech recognition software
  - ✦ Tablet PC's
  - ✦ Digital pens



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## Overview

- Background
- Rationale
- Assumptions
- Constraints
- Approach
- Method
- Security
- Training Considerations
- Findings



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## Mobile Workforce

- Most of the essential functions in Social Work practice are completed away from the social worker's desk and their desktop computer
  - Interviews
  - Assessments
  - Home Visits
  - Treatment Team Meetings
  - Court Hearings
  - Provider Evaluations

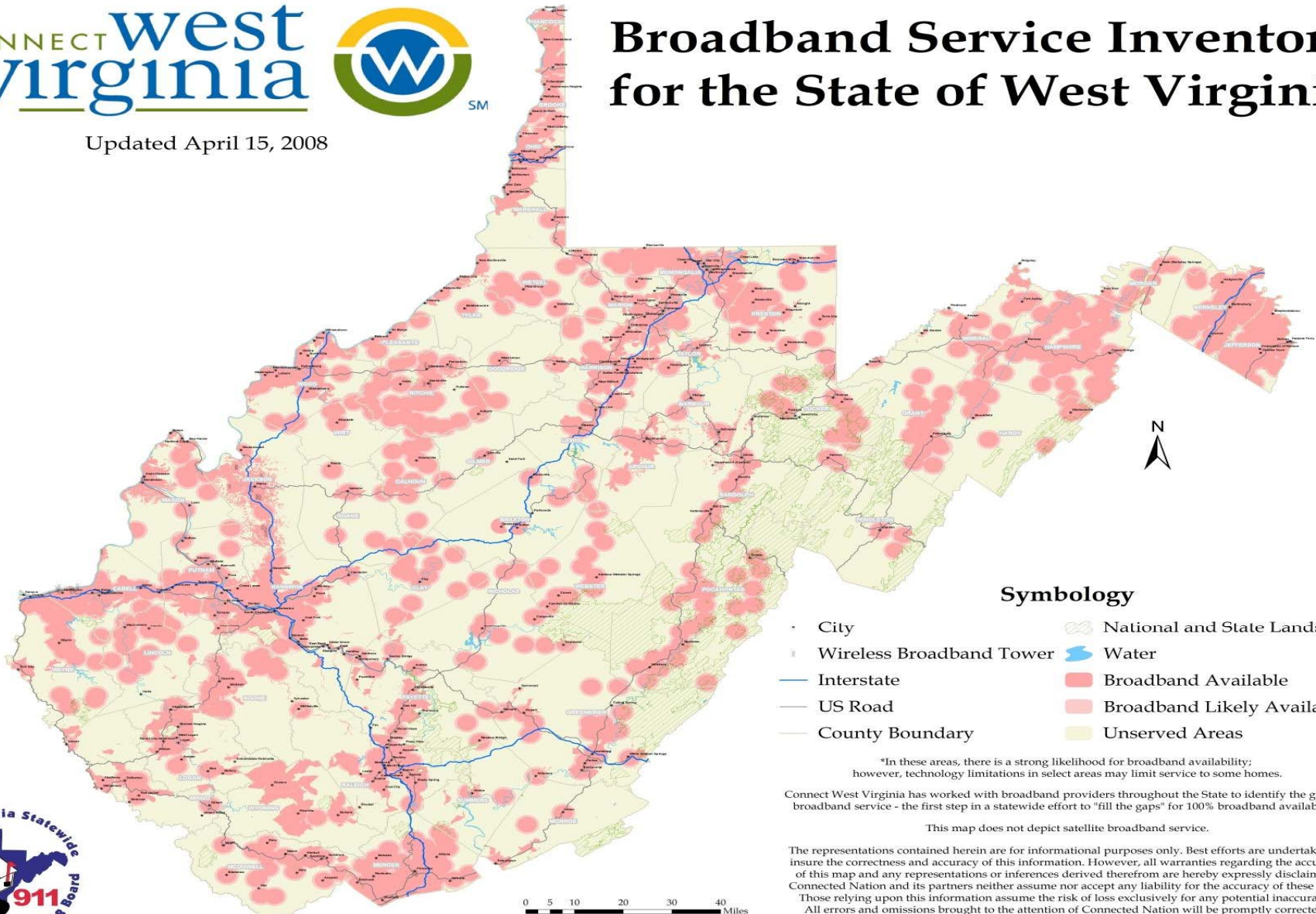


# CONNECT west Virginia



Updated April 15, 2008

## Broadband Service Inventory for the State of West Virginia



### Symbology

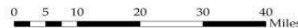
- City
- ⊗ Wireless Broadband Tower
- Interstate
- US Road
- County Boundary
- ⊗ National and State Lands
- ⊗ Water
- ⊗ Broadband Available
- ⊗ Broadband Likely Available\*
- ⊗ Unserved Areas

\*In these areas, there is a strong likelihood for broadband availability; however, technology limitations in select areas may limit service to some homes.

Connect West Virginia has worked with broadband providers throughout the State to identify the gaps in broadband service - the first step in a statewide effort to "fill the gaps" for 100% broadband availability.

This map does not depict satellite broadband service.

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## Rationale

- ✦ Business need to provide off line work capability
- ✦ Allow staff to capitalize on “wait time”
- ✦ Greater flexibility with work schedules
- ✦ Increased productivity
- ✦ Reduce staff stress



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## + WV Mobile Technology Progress

- + Laptops – Dial up
- + PDAs



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## Approach

- Two disconnected computing methods were adopted to meet this business need for off line work:
  - FACTS to Go
  - Digital Pen



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## + Digital Pen

- + Bridges the Gap between paper documentation and electronic record keeping
- + Digital pen is being used with WV Safety First – Protection Plans completed by Child Protective Service Workers



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## + Digital Pen

### + Hardware

- + Brand: Logitech Model io2

### + Software

- + Digital Pen

- + Firmware - Pen Software Version: 3.3.631.1

- + Pen Driver Version: 3.1.593.1

### + Paper

- + Xpaper Smartwrite (Professional Edition)



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## + Digital Pen Composition

- + Ink, Camera, CPU, Bluetooth, Battery

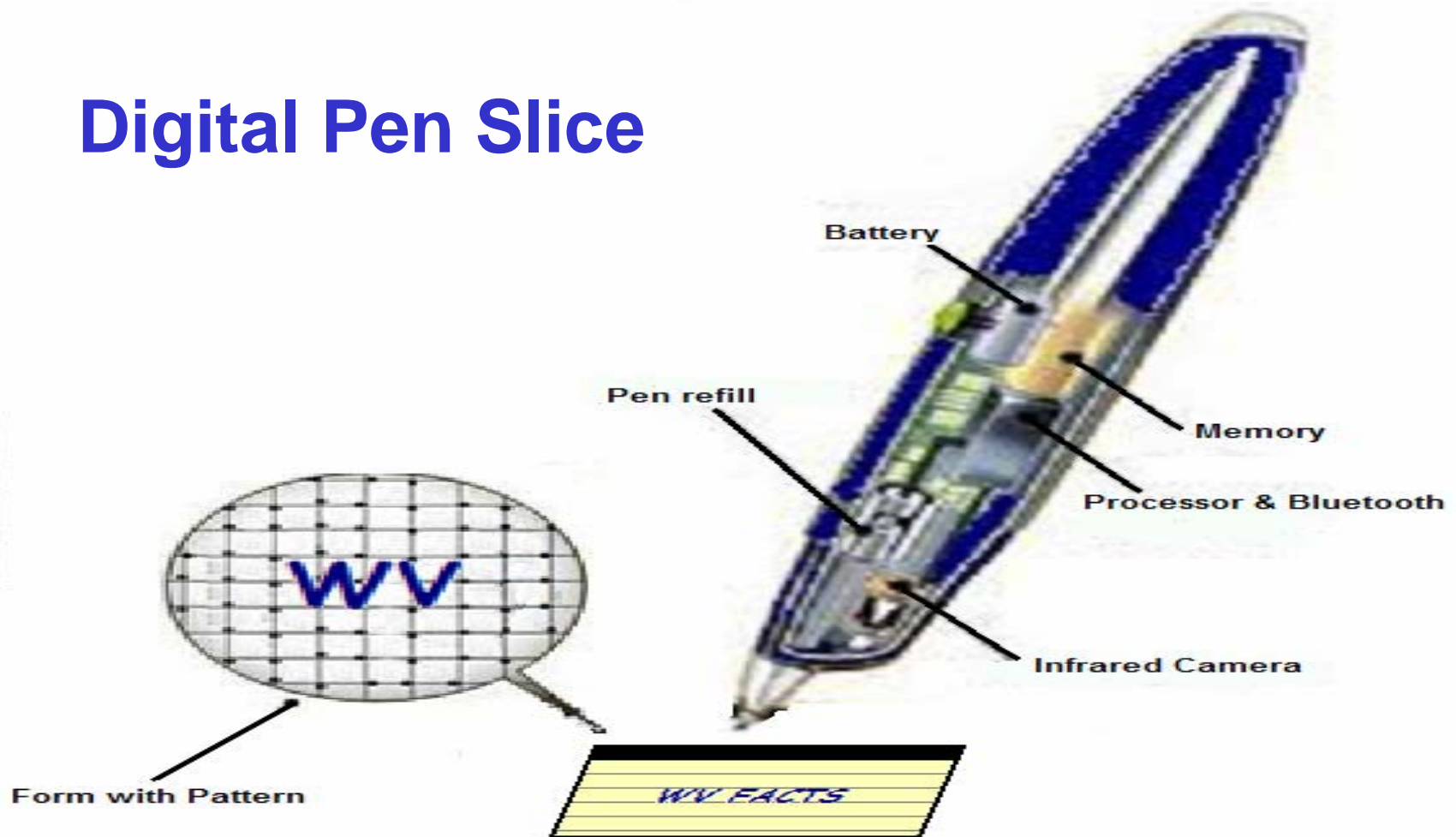
## + Digital Pen at Work

- + Optical sensors read unique dot patterns printed on 'special' paper and records the writing for each of the dot coordinates
- + Each sheet of 'Special Paper' contains millions of tiny dots arranged in a unique pattern.



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## Digital Pen Slice





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## Digital Pen

### How does it work?

- When a document is printed on the special paper, an electronic image of the form is also created and stored on our network
- Workers write on the printed document using the digital pen
- The writing is recorded to the pen memory
- Through the uniqueness of the special paper, the pen recognizes the correct form to match



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## ■ Digital Pen

### ■ How does it work?

- The data stored in the pen is transmitted through a cradle and matched with the image of the original document
- An exact copy of the handwritten document in a PDF format is created
- The PDF document can be uploaded to the case file cabinet and incorporated as part of the client's electronic record



**WV SAFETY FIRST / PROTECTION PLAN**

File in Social Services Narrative Block  
and Doc Tracking in Facts

DATE: \_\_\_\_\_ FAMILY NAME: \_\_\_\_\_

NAME(S) OF CHILDREN TO BE PROTECTED: 1) _____	2) _____
3) _____	4) _____
5) _____	6) _____

Describe the Present Danger(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ACTION TO CONTROL SAFETY (Who will do what for which child(ren)?)	Start Date	Frequency (how often – days, hours, etc.)	Monitoring Date (Re-evaluation date or Termination date – specify)
A. _____ _____	_____	_____	_____
B. _____ _____	_____	_____	_____
C. _____ _____	_____	_____	_____

(Plan may only be in effect for 7 working days)

This plan begins \_\_\_\_\_ This plan will end \_\_\_\_\_

I have discussed the attached Protection Plan and the consequences of non-compliance with the caretaker and all those who are responsible for carrying out the plan. I have their agreement to abide by the terms and the conditions of the plan.

Investigator/Worker \_\_\_\_\_ Date \_\_\_\_\_ Phone \_\_\_\_\_

Supervisor's Name and Phone \_\_\_\_\_

*I/we have discussed the Protection Plan with the investigator/worker. We understand its contents and that it is voluntary, and we agree to abide by the terms and conditions of the plan. If something happens which prevents us from carrying out the plan, we will immediately notify the investigator/worker. If the investigator/worker is unavailable, we will notify the supervisor. We understand that failure to agree to the plan or carry out the plan may result in a reassessment of my home and possible protective custody and/or referral to the Prosecuting Attorney's office for a court order to remove my children from my home. I will then have the opportunity to plead my case in court.*

Parent/Caretaker \_\_\_\_\_ Date \_\_\_\_\_

Other Parent/Caretaker \_\_\_\_\_ Date \_\_\_\_\_

Person responsible for carrying out the Protection Plan,  
if other than the parent or caretaker: \_\_\_\_\_ Date \_\_\_\_\_

**Supervisory Approvals:**  
Supervisor approval required within 24 hours of the implementation of the Assessment and/or Plan (signature or verbal) or the next working day.

Supervisor gave verbal approval by phone \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Supervisor's approval of written plan \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_



**WV SAFETY FIRST / PROTECTION PLAN**

File in Social Services Narrative Block  
and Doc Tracking In Facts

DATE: 4/27/07 FAMILY NAME: Test

NAME(S) OF CHILDREN TO BE PROTECTED: 1) Karene 2) Joyce  
3) \_\_\_\_\_ 4) \_\_\_\_\_  
5) \_\_\_\_\_ 6) \_\_\_\_\_

Describe the Present Danger(s): Left home alone

ACTION TO CONTROL SAFETY (Who will do what for which child(ren)?	Start Date	Frequency (how often – days, hours, etc.)	Monitoring Date (Re-evaluation date or Termination date – specify)
A. <u>provide supervision</u>			
B. _____			
C. _____			

(Plan may only be in effect for 7 working days)  
This plan begins \_\_\_\_\_ This plan will end \_\_\_\_\_

I have discussed the attached Protection Plan and the consequences of non-compliance with the caretaker and all those who are responsible for carrying out the plan. I have their agreement to abide by the terms and the conditions of the plan.

Investigator/Worker Maryanne Date today Phone \_\_\_\_\_  
Supervisor's Name and Phone \_\_\_\_\_

I/we have discussed the Protection Plan with the investigator/worker. We understand its contents and that it is voluntary, and we agree to abide by the terms and conditions of the plan. If something happens which prevents us from carrying out the plan, we will immediately notify the investigator/worker. If the investigator/worker is unavailable, we will notify the supervisor. We understand that failure to agree to the plan or carry out the plan may result in a reassessment of my home and possible protective custody and/or referral to the Prosecuting Attorney's office for a court order to remove my children from my home. I will then have the opportunity to plead my case in court.

Parent/Caretaker [Signature] Date \_\_\_\_\_  
Other Parent/Caretaker \_\_\_\_\_ Date \_\_\_\_\_

Person responsible for carrying out the Protection Plan, if other than the parent or caretaker: \_\_\_\_\_ Date \_\_\_\_\_

**Supervisory Approvals:**  
Supervisor approval required within 24 hours of the implementation of the Assessment and/or Plan (signature or verbal) or the next working day.

Supervisor gave verbal approval by phone \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
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## + Digital Pen

### + What are the Benefits?

- + Speedier forms processing
- + Transparent transition and acceptance of a new technology
- + Traceability
- + Enhanced data accuracy
- + Eliminates lost paperwork



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## + Digital Pen

### + What are the Constraints?

#### + Technical

- + Large Scale Printing of forms requires a certification
- + Our State Print Shop is not certified to print forms
- + Forms are currently printed centrally by FACTS

#### + Business

- + Addition of new forms delayed due to changes in BCF Business process
- + Staff turnover



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## + Digital Pen

### + Findings

- + Minimal one time training was required
- + Users reported that they felt comfortable with the technology immediately
- + Users reported that it was easy to incorporate in their existing business practice
- + Users found that it was a tremendous benefit to be able to store the forms in the electronic file cabinet for future reference



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## + Digital Pen

### + Lessons Learned

- + Plan for staff turn over
- + Rigorous evaluation of forms to determine:
  - + Forms that are appropriate to be stored as a picture
  - + Forms that need to be stored as data



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## + Digital Pen

### + Next Steps

- + User driven development
- + Additional documents
- + Transferring information directly into the FACTS database



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