

# Technology Guide

# The Pennsylvania Child Welfare Training Program

University of Pittsburgh,
School of Social Work
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This guide was developed for counties using the Lifebook

<u>T901</u> Tablet Personal Computer©

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#### Introduction

This guide was developed for children and youth administrators and information technology staff who support county child welfare workers. However, administrators are encouraged to share this document with equipment users. Also, when reviewing the guide, it is important to note the following:

- This guide includes product information on all of the equipment purchases as
  well background information related to the decisions to purchase the equipment.
  It is highly recommended that the readers take the time to read the background
  information as it may help in the decision making process in regard to selecting
  which staff within the agency may benefit the most from the technology being
  offered.
- While only a few of the sections may be relevant to the equipment in which was ordered by an individual county; administrators and information technology staff are encouraged to read all portions of the guide; as this information may be helpful when making decisions related to future technology purchases for your agency.
- In addition to providing information regarding the products that were purchased, information from caseworkers, administrators and information technology staff who have actively used the technology was included in this report. In many cases, they have provided recommendations intended to maximize the use of the equipment provided.

It is further recommended that administrators and information technology staff read this information and share it with others in their agency prior to November 10, 2011. On November 10, 2011, a web-ex has been scheduled for counties to ask any questions regarding the preparation and distribution of the equipment to their staff. A formal invitation will be sent to each administrator and information technology staff at the end of October based on the contact information provided on the Mobile Technology Support Acknowledgement form. If counties have questions prior to that time, they are encouraged to contact the Pennsylvania Child Welfare Training Program using the following e-mail account <a href="mailto:cwvisit@pitt.edu">cwvisit@pitt.edu</a>. Questions sent to this account will be forwarded to the individual(s) who can best address the concerns raised.

#### Please note:

Two versions of this guide has been created; one for counties who received the Fujitsu Lifebook Tablet Personal Computer© (T5010 Model) and one for counties who received the Lifebook Tablet Personal Computer© (T901 Model). While the end user will see very little difference between the two models, there are differences regarding the tablet set-up as well as how the tablets "interact" with the other equipment orders.

(This guide is for counties who received the T901 Model)

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# A. The Child and Family Services Improvement Act

In September 2006, the Child and Family Services Improvement Act was signed into law (Public Law [P.L.] 109-288), creating newer and stronger safeguards to promote the safety and well-being of children and their families. The Child & Family Services Improvement Act of 2006 addressed findings from the Child and Family Service Review. Data collected demonstrated "a strong correlation between frequent caseworker visits with children and positive outcomes for these children, such as timely adherence to permanency and other indicators of child well-being". The legislation focused on improving the frequency and quality of monthly caseworker visits to children in federally defined foster care. Child & Family Services Improvement Act of 2006 authorized \$55 million federal dollars to be used to support this effort. The funding was spread over a five year period (2007 – 2012) and, as such, each state was required to develop a five year plan. The plan was to be targeted toward meeting the federal standards of the frequency of caseworker visits to children in federally defined foster care. The legislation also encouraged states to use the funding to support other areas that could impact the frequency and quality of caseworker visits. These areas included: caseworker retention and recruitment issues, as well as access to mobile technology.

# B. Pennsylvania's Five Year Quality Visitation Program Improvement Plan

#### **Quality Visitation Data**

Following Pennsylvania's initial federal submission of visitation data in 2007, a baseline of 77% of children in federally defined foster care being visited on a monthly basis was established. After establishing their baseline percentage, states were required to develop a five-year program improvement plan focused on efforts to improve the percentage of children visited on a monthly basis in yearly increments in order to reach the federal benchmark of 90% by October 1, 2011. Pennsylvania reached the benchmark in 2010 and hopes to maintain this mark for this reporting period.

#### Amendment and Extension to the Child and Family Services Improvement Act

On September 30, 2011, the amendment and extension of the Child and Family Services and Improvement Act was signed into law. A portion of this act extended the visitation benchmarks and funding support through 2016. The current benchmark of 90% of children in federally defined foster care being seen on a monthly basis is increased to 95% by 2015.

#### Pennsylvania's Quality Visitation Program Improvement Plan

In 2008, the Office of Children, Youth and Families met with key stakeholders to develop Pennsylvania's five-year Quality Visitation Improvement Plan. The final plan addressed a variety of issues designed to improve tracking of, and the quality of, visitation of youth in federally defined foster care. Within this plan, the Office of Children, Youth and Families committed a portion of these funds to conduct research regarding mobile technology and quality caseworker's visitation practices. At that time, the Office of Children, Youth and Families partnered with the University of Pittsburgh's, School of Social Work, Child Welfare Research and Education Programs to conduct research on the use of technology in this setting. The research began in 2009 and the equipment was distributed in 2010.

During that same time period, a portion of the funding was used to develop and distribute a field guide to quality visitation for caseworkers. The guide was the result of recommendations from a workgroup of child welfare stakeholders and is intended is to ingrain the practice of quality visitation into all aspects of child welfare practice, including children in foster care. This guide is now included as a resource in the out-of-home safety training.

# C. Mobile Technology Research Project Overview

The partnership between the Office of Children, Youth and Families and the University of Pittsburgh's, School of Social Work, Child Welfare Research and Education Programs resulted in the development of a research study entitled "Use of Mobile Technology in Caseworker Visits to Children in Federally Defined Foster Care". The research was designed to examine two different questions:

- What are the current visitation practices in Pennsylvania?
- Does the use of technology in the field impact caseworker visitation practices related to engagement, job satisfaction and a sense of professionalism?

In 2009, baseline data for this research was obtained through a survey of all 67 counties, which gathered data related to current policies and practices related to monthly visitation of children in federally defined foster care and the quality of those visits. After the information was gathered, the next step was to decide which type of mobile technology may provide the most benefits to caseworkers visiting youth in federally defined foster care. To this end, a technology day was held in July of 2009.

#### D. Mobile Technology Equipment Selection

The goal of the technology demonstration was to define a mobile technology direction that would efficiently and effectively support County Children and Youth Agency child welfare workers in their daily work, throughout the commonwealth. A variety of vendors provided demonstrations to a diverse audience. The audience included: county stakeholders, information technology staff and program staff from the Office of Children Youth and Families and the University of Pittsburgh's, School of Social Work, Pennsylvania Child Welfare Training Program. Products demonstrated included: smart phones, net books, tablet personal computers, voice automated software and smart pens. Those who participated in the technology vendor day were asked to consider which of the products they felt would have the greatest impact in the following areas:

- 1. Increase productivity by reducing or eliminating the need to record/enter the same data multiple times;
- 2. Improve worker efficiency by reducing manual processes and work-around activities;
- 3. Support common casework visits with children and families, assessments, and contacts:
- 4. Capture field data at the time of the activity;
- 5. Reduce staff stress;
- 6. Provide greater flexibility for caseworkers and/or
- 7. Increase caseworker safety.

Following the demonstrations, participants showed interest in several of the types of technology presented but ultimately agreed that use of Fujitsu Lifebook T5010 Tablet Personal Computer© could have potential benefits in the majority of the seven categories listed above. Participants also showed an interest in the software to enable caseworkers to convert "voice to text". It was felt that this software could increase worker efficiency and worker productivity.

## E. Mobile Technology Research Project Implementation

Based on the information gathered from the baseline data and the interest shown from stakeholders during the technology vendor day, the Pennsylvania Department of Public Welfare, Office of Children Youth and Families, committed a portion of the funds made available through the Child and Family Services and Improvement legislation toward the purchase of the Fujitsu Lifebook T5010 Tablet Personal Computers © (Tablets). Research then focused on evaluating the use of these tablets by caseworkers who have a responsibility for at least a percentage of foster case cases on their ongoing caseload.

Sixty-four of Pennsylvania's sixty-seven counties were eligible and interested in participating in the study which lasted approximately ten months. A random sample based on a variety of demographic data was conducted by an independent statistician. For purposes of the study, counties were then divided into one of two groups, intervention counties or control counties.

# **Intervention Counties**

A total of 400 tablets were distributed to caseworkers in the intervention counties.

At the start of the research, caseworkers were asked to participate in training and complete a survey regarding the use of technology.

At the end of the six month period, these same caseworkers were asked to once again complete a technology survey, as well as a complete a Human Caring Inventory (revised).

#### **Control Counties**

A total of 202 caseworkers were selected from the control counties.

Care was taken to ensure that these caseworkers played similar roles as the intervention county participant's in terms of their interactions with youth in federally defined foster care.

Control county caseworkers were asked to provide basic demographic data and completed the same Human Caring Inventory (revised) taken by intervention participants.

In addition to the data that was collected through the surveys, additional information was gathered through a variety of methods. The methods are listed on the following page.

- Two focus groups with administrators;
- Two focus groups with caseworkers;
- A technology and quality visitation survey distributed to all counties (82% survey completion rate) and
- A general log kept by the Pennsylvania Child Welfare Program indicating successes and challenges of using the technology noted by administrators, information technology staff and tablet users.

#### F. Research Findings and Lessons Learned

Collection of the data was complete in July of 2011 and, while the research findings are still being evaluated, below are some of the main themes that were seen by the researchers in the focus groups and by program staff speaking with tablet users. These themes were selected for inclusion in the guide because they highlight some policies, procedures and general areas in which administrators and/or information technology staff may want to consider reviewing prior to distributing equipment. The themes contain information regarding; mobility and use, engaging families and support from management and information technology staff.

#### **Research Findings/Lessons Learned #1**

Mobility and Use – Workers felt that they saw gains in productivity that enabled them to submit documents more timely. However, workers were unsure as to whether this time saving measure translated into increased contact/time with families. Workers and administrators have reported that mobile technology has shifted the location of their work from the office to less traditional settings (cars, waiting rooms, courts, coffee shops, public libraries, worker's home). While many workers enjoyed increased flexibility of this "mobile office", concerns were raised about the increase of work that was being completed at non-traditional locations due to the potential lack of supervision and compensation.

#### **Practice / Policy Consideration:**

Caseworkers advocated for open and honest discussions with supervisors about working from home as well as saw a need for agencies to review policies and procedures relating to overtime and compensation when working at home.

# Research Findings/Lessons Learned #2

<u>Engaging Families/Use of Tablets with Families</u> - Caseworkers responded very differently to the use of the mobile technology in the homes of their families. The following is a list of strengths and challenges associated with using the tablets with families.

# Strengths

- Some caseworkers indicated that they were able to integrate their use of the tablets into their daily interactions with families. This included engaging small children through the use of painting/drawing feature of the tablet and using the tablet in the home for completing assessments and case plans with the family.
- In a few cases, the tablets were used to e-mail signed documents to supervisors for approval while still in the family's home.
- One administrator talked about using the tablets to access SKYPE for remote visitation and preliminary court hearings.
- Whether the notebooks were left in the car or brought into the home, workers did agree that, following a visit, they often went to a place where they could type up their notes and observations using the tablet.

# Challenges

- Some caseworkers felt that the use of the tablet computer in the home
  was impersonal and could be perceived as disrespectful to clients. As a
  result, these caseworkers reported that they left the tablets in their cars
  when visiting families.
- Some caseworkers feared that the unpredictability of the home environment could result in the tablet becoming broken and they had concerns that they would be responsible for the damages.
- Some caseworkers also felt that they tablets presented safety risks.
   Concerns were raised that a client may use the tablet as a weapon as well as concerns surrounding a caseworker's need to leave a home quickly. If the home becomes unsafe, the time needed to pack up equipment may put their safety at risk.

## **Practice / Policy Consideration:**

Caseworkers using the technology advocated for policies to be in place that protect the caseworker from liability if the technology is damaged or if a situation becomes unsafe and they are forced to leave the equipment behind.

Providing opportunities for caseworkers to share their experiences with each other may help change perceptions as well as promote the use of promising practices to using the technology in the field.

#### Research Findings/Lessons Learned #3

Support from Management and Information Technology Staff - Just as policies, procedures and information technology capacity for each county varies, so did the feedback received from counties regarding the type of support needed to use the technology in the field. Despite the different needs, the feedback regarding support generally fell into one of three categories: support from information technology staff, support from administrators and support from supervisors. The need for support from all three groups was seen as essential in giving caseworkers the best opportunity to benefit from the technology. Below were some of the most frequent comments.

- The need for administrators to work with the local information technology departments prior to the distribution of equipment to ensure that support is available.
- The ability to engage information technology staff and supervisors to find solutions to challenges encountered in the field and the provision of field support as needed.
- Caseworkers need leadership from management and supervisors to assist in defining the desired use of technology and to support any necessary revisions to policies. This includes the revision or development of relevant policies.
- Administrators, supervisors and information technology staff ensure that, if needed, opportunities are provided for staff to receive individualized training.

# **Practice / Policy Considerations**

- Consider developing a plan to support the use of technology within your agency. Management, supervisors, information technology staff and caseworkers should all have a role in the development of the plan.
- Each individual's personalities, skill level and cognitive processes impact how mobile technologies are used and support should be individualized according to the individual needs.
- Changing the way people work requires giving them time to learn and achieve proficiency in new skills; expect initial challenges.

#### **G.** Current Distribution

Based off of the feedback received from counties during the research project, the preliminary research findings, and the results of a quality visitation survey that was sent to county administrators; the Office of Children, Youth and Families made the decision to continue to support the use of mobile technology in 2011 through the purchase and distribution of additional equipment. Based off of the survey results, the decision was made to purchase <u>additional tablets</u>, <u>mobile printers</u>, <u>voice</u> recognition software and <u>headsets</u> to enable use of existing voice recognition features in county computers.

#### A. Tablet Overview

One of the frequently asked questions at the start of this project was: "What is the difference between a tablet computer and a laptop?" Below you will find some of the biggest differences between these two mobile devices. This information may be helpful to think about when deciding which staff may be able to benefit the most from using this type of technology.

The biggest difference between a tablet and a laptop is the general design of the tablet. Users have options regarding the screen orientation and can use a stylist (pen) for input. Below you will find some of the main differences between tablets and laptops:

- The tablet screen can be laid flat allowing the user to take notes; just as they
  would write on a paper tablet. This screen orientation eliminates the barrier of
  having an open screen between the caseworker and client. The caseworker
  can then choose to save this information as their handwritten notes or their
  notes can be converted to text and saved.
- The tablet screen also swivels so that others can see what is being typed into the computer. This allows caseworkers to complete forms and other written notes, while at the same time, allowing the families to see what information is being collected and recorded. Caseworkers can also have families sign completed forms on-site, using the signature pad feature.
- In addition to the components listed above, the tablets were purchased with Windows 7© as the operating system. Using the Windows 7© operating system with the configuration of the tablets (T901 model) provides additional benefits as they relate to input devices, software and hardware of the tablet. One big advantage of using the Window's 7 operating system with the tablets is that enables users to access and use a voice to text feature while working in the field.



Tablets have many of the same features as laptops and, therefore, can be used in the same manner. The following contains the features stakeholders felt would be particularly beneficial for caseworkers. These features are included in the Fujitsu Tablet Personal Computer© T901 series and are also available in some laptop models.

- Web-camera (Can be used to take pictures and to participate in video conferences.)
- Bluetooth® capabilities (Wireless technology that enables devices such as portable computers, cell phones, and portable handheld devices to connect to each other and to the internet.)
- Built in dual microphones (Allows caseworker to record voice and annotations.)
- Fingerprint sensors (Allows individual users to log onto system and password protected websites by swiping finger over the sensor.)

# **B.** Support for Tablet Users

The Office of Children, Youth and Families and the Pennsylvania Child Welfare Training Program will provide several forums to support tablet users in their efforts to become familiar with the new technology. The forums currently identified are listed below.

- 1. Online Training
  - "Using Fujitsu Lifebook"
  - "Youth and Family Engagement and the Use of Technology"
- 2. Quarterly Meetings (via web-ex)

While these forums were identified for caseworkers using the tablets, it is recommended that administrators and information technology staff take a few minutes to review the resources and, when appropriate, afford equipment users the opportunity to access these resources. The next page provides a brief overview of each of the resources listed.

# 1. On-line Training: Online Training: "Using Fujitsu Lifebook"

Using technology in the child welfare field is developing in Pennsylvania. Some users are very familiar with how to incorporate technology into their tasks, which maximizes their efficiency, while others are learning how to use technology. Prior to using the tablet in the field, it is highly recommended that individuals, supervisors and IT support staff complete the following two online courses: *Using Your Fujitsu Lifebook*, and *Youth and Family Engagement and the Use of Technology*.

These courses will provide staff with the many functions of the tablet, as well as how to ensure engagement is maintained with children, youth and families, while utilizing mobile technology. Users have the ability to access the course at any time to view information on specific functions.

# On-line Training Course Descriptions

<u>Using Your Fujitsu© Lifebook:</u> This course will allow direct service workers the opportunity to maximize the use of your Fujitsu Tablet PC as they conduct home visits. The course will guide you in the use of the many functions of the tablet such as how to take handwritten notes and convert your notes to text; how to use a printed form and complete it without having to use the keyboard; how to create a digital notebook for each of your cases; and how to easily input and then search the information you need. All workshop activities and content are geared to help you conduct home visits, complete the safety assessment worksheet, and create the safety plan. You will even learn how to get a digital signature from each child's caregiver.

Youth and Family Engagement and the Use of Technology: Family and youth engagement is the centerpiece of a caseworker's work with families. This workshop will reinforce the critical nature of engagement for all children, youth, and families and explore how technology is a tool that can be used to work collaboratively with youth and families and enhance engagement. Further, this workshop will examine how the use of technology in the field can allow more time to be spent engaging families in the field. Participants will explore how to maintain and/or enhance their engagement skills with children, youth, and families while learning new strategies to engage children, youth, and families while using mobile technology.

# To access the online trainings, please follow the steps listed below:

- 1. Go to http://www.e-learn.pitt.edu
- 2. Enter your username and password
- 3. Click on the Course Catalog Tab
- 4. Choose the course you wish to complete by clicking the symbol with a "plus" sign
- 5. Click the "Yes" tab to enroll in the course

\*If you have any questions regarding online trainings, a FAQ is available at the following website: http://www.pacwcbt.pitt.edu/ELEARN.htm.

While the online training was developed to provide foundational skills for using the tablet in the field, the second forum allows caseworkers from across the State to share their experiences with each other.

2. Quarterly Meetings - Throughout 2012, the Pennsylvania Child Welfare Training Program will host web-exes for tablet users. The meetings will provide an informal setting for caseworkers to share the unique ways in which use of the tablet has supported their work as well as provide a place to problem solve any challenges that they have encountered when trying to incorporate the use of the tablets into their daily routine. Administrators and information technology staff are welcome and encouraged to participate in these events.

The Pennsylvania Child Welfare Training Program will document information gathered and share this information as part of the larger effort to support the use of technology in child welfare practice.

Once the equipment is distributed to counties, the Pennsylvania Child Welfare Training Program will be asking for contact information for equipment users. This information will be used to notify participants of meetings and to help facilitate the process of information sharing.

# C. Support for Information Technology Staff

The Pennsylvania Child Welfare Training Program will be able to provide forums for support such as the quarterly web-ex and will be sharing relevant information with administrators and information technology staff. However, since each county has different needs in regard to information technology and different policies and procedures that relate to the use of technology, the Pennsylvania Child Welfare Training Program is limited to the type of technical support that can be provided. With that being said, there is technical assistance available through Fujitsu. Information technology staff can contact the manufacturer directly by using their helpdesk. Additional information regarding the Fujitsu Helpdesk and about the warranties purchased for the tablets is located below.

#### **WARRANTY INFORMATION**

The warranties purchased cover a four year time period. The exact date will be forwarded to counties in upcoming weeks.

#### **CONTACTING FUJITSU**

Web-site: us.fujitsu.com/computers

Phone: 1.800.8FUJITS

E-mail: 8fujitsu@us.fujitsu.com

## **Helpful Hints - Contacting Fujitsu:**

When contacting Fujitsu for technical support, please be prepared to provide the service representative with the individual serial number and the tablet model number. Tablet serial numbers are located on the bottom of each tablet and the model number is LIFEBOOK T5010.

While counties have reported having very positive experiences with the Fujitsu Helpdesk, some problems have been reported regarding "tablet ownership" purchases. These issues are a result of the tablets being purchased by the Pennsylvania Child Welfare Training Program but being distributed to individual counties. While this issue is expected to be resolved in upcoming months, it is recommended that counties do the following:

- If service is denied because of issues related to tablet ownership, please e-mail the Pennsylvania Child Welfare Training Program at <a href="mailto:cwvisit@pitt.edu">cwvisit@pitt.edu</a> and provide the Fujitsu helpdesk ticket number and the serial number on the tablet. The Pennsylvania Child Welfare Training Program will contact Fujitsu to confirm the counties ownership. (Typically, the matter is resolved within 48 hours of the initial call.)
- If the service requires the tablet to be returned to the company for repair or replacement, confirm that mailing address of your agency prior to ending the call. This will prevent any shipping errors that may be a result of Fujitsu records indicating the owner is located at the University of Pittsburgh.

Documents related to the warranty purchased are contained as appendices to this guide.

- Appendix A: Service and Support Information
- Appendix B: How to Get Service
- Appendix C: Fact Sheet Standard Warranty
- Appendix D: Fact Sheet Accidental Damage Protection

# D. Preparing for Distribution to Caseworkers (Microsoft Office©)

The tablets will arrive in factory condition (as packaged by the manufacturer). Although the support needed from information technology to prepare the tablets for use by caseworkers is very similar to the preparation that was needed during for the mobile technology research project, the steps taken will vary from county to county. These variations are due to individual counties policies and procedures as well as their informational technology capacity.

Despite the variations among counties, there are several pieces of information that will be helpful to know when preparing the tablets for use. This information is being provided as answer to the most frequently asked questions during the research project.

# Microsoft Office© Licenses

- Microsoft Office© Licenses were not purchased with the tablets.
- In most cases, counties should not have to purchase additional licenses.
  - Single licenses of Microsoft Office© Home and Business, and Office Professional can be installed on up to two computers.
  - The disc version of Microsoft Office© allows the user to install one copy on a desktop pc, and one copy on a mobile device such as a tablet or laptop. More information on Microsoft Office© licensing can be found at: <a href="http://office.microsoft.com/en-us/buy/office-product-key-card-frequently-asked-questions-HA101847520.aspx">http://office.microsoft.com/en-us/buy/office-product-key-card-frequently-asked-questions-HA101847520.aspx</a>

- If a county is currently using multiple versions of Microsoft Office©, it is recommended that the most recent version be installed on the tablets.
  - Microsoft Office 2007 and 2010 come standard with One-Note software. On its own, OneNote is designed for collecting, organizing and sharing unfinished materials. While some caseworkers have reported using One-Note© to organize electronic files to appear similar to the client's hard copy file, the biggest advantage noted was the ability to convert the written word to text within the case files. (More information on One-Note is contained in Section II, X: Maximizing the Use of Tablet Features.)
  - Microsoft Office XP© and newer editions (Office 2003, 2007, and 2010©) of Microsoft Office© support the digital signatures in Microsoft Word©.
  - Older versions of Microsoft Office© such as 2000, 1998, and 1995 do not support digital signatures and other functionality of the tablets.

# E. Preparing for Distribution to Caseworkers (Agency Forms)

Prior to distributing tablets to caseworkers, it is recommended that information technology staff obtain a list of frequently used forms from administrators and/or supervisors and have them loaded onto the tablets prior to distributing the equipment to caseworkers. Having these forms "pre-loaded" on the tablet was mentioned by caseworkers as one of the ways in which use of the tablet in the field increased productivity.

- Examples of existing agency forms may include the Safety Assessment forms, risk Assessment forms and case planning documents.
- The tablet has the capability to receive signatures from clients while in the field. If you wish to use the signature feature of the tablet and need access to "signable" forms, please contact your regional Office of Children Youth and Families to obtain these forms.

# F. Preparing for Distribution to Caseworkers (Security Measures)

Because of the sensitive and confidential materials that will be entered and stored on the tablets, it is recommended that each county review any current policies that they have in place regarding use of mobile technology as well as explore the resources that are available to them to ensure that family data is protected.

Additionally, it is recommended that agency specific policies be communicated to caseworkers and resources be made available to them prior to the distribution of the equipment.

During the research study, information technology staff in counties and at the Pennsylvania Child Welfare Training Program discussed strategies to help protect data. The strategies included the use of the tablet <u>fingerprint sensor</u> and the use of encryption software.

<u>Fingerprint Sensor</u> – The tablets include a fingerprint sensor which allows users to log onto systems, password protected web-sites and applications by swiping their finger of the sensor.

<u>Encryption Software</u> - Encryption software can be purchased to protect sensitive data when storing locally, or sending over the internet. Some highly regarded pieces of encryption software include: Trustwave Encryption©, Pkware©, Symantec Laptop Encryption© and Truecrypt©.

# G. Preparing for Distribution to Caseworkers (Headset)

Since the T901 version of the Fujitsu Tablet Personal Computer© operates using Windows 7©, the Office of Children, Youth and Families purchased headsets to be distributed with each of the tablets. The headsets can be used to enable users to access the voice recognition feature built into the operating system.

Because the voice to text feature is built into the operating system, there is very little set up needed to begin using the feature. In many cases, the user may even be able to begin using the feature without the assistance from informational technology staff, using the tutorial provided in Windows 7©.

However, there are a few steps that users and informational staff will want to make sure they are aware of in order to receive the best results when using the built in voice recognition software with Windows 7©.

- The first thing is to plug in the provided headset, open up the Control Panel, and double click on the *speech recognition* icon. Make sure the microphone is set up correctly by selecting set up microphone and following the prompts.
- After setting up the headphones, the user should open the voice recognition feature and read the text provided. This step helps to "train the computer" to understand the users speech patterns and dialect.

- When dictating text, the user should attempt to pronounce words correctly
  while maintaining fluid speech. The feature, when unsure of a word or phrase,
  will attempt to provide the correct word by analyzing its context.
- Correct mistakes before carrying on to the next sentence or paragraph. If the software has made a mistake, it may repeat that mistake the next time the word or phrase is used. Corrections can be with your mouse and keyboard, however using the voice feature to correct mistakes will improve the accuracy of commands and dictation at a faster rate
- Maintaining microphone positioning when using the voice recognition software is also important.

More information regarding use of the headsets and helpful web-sites for information technology staff and equipment users is located in Section V of this guide.

# **Dragon NaturallySpeaking™ Licenses and Additional Headsets**

Based off the requests made by counties and their system capacity, some counties may have received additional headsets or Dragon NaturallySpeaking™ licenses provide them access to voice to text features on existing agency computers. If you received either of these items, please reference the appropriate sections of this quide.

#### H. Maximizing the Use of Tablet Features

Throughout the mobile technology research study, counties identified additional equipment that they felt could help maximize the use of the tablet features and, therefore, increase caseworker productivity and satisfaction when using the tablets. These products discussed most frequently were Intel Wireless (air cards) with service contracts, docking stations and wireless accessories.

Intel Wireless (Air Card) - An air card is a device that plugs into your tablet and allows you to access the Internet through a phone network's 3G capabilities or similar technology. Multiple providers offer them, and while results vary in some rural locations, the intent is to give the user internet access on the go. Plans would need to be purchased with air cards similar to those of smart phones with internet access.

The purchase of air cards and service plans were strongly encouraged by almost all users but feedback from counties who used the air card to access CAPS or agency networks indicated a greater degree of satisfaction when using the tablets.

<u>Docking Stations</u> - Docking stations can be purchased to allow the user to get in and out of the office without the hassle of plugging in and unplugging components such as mice, power cables, network cables, printers, etc, especially when the tablet is designated as the users workstation.

Docking stations are highly recommended for agencies that have workers use the tablets exclusively (replacing worker's desktop computers with the tablets).

<u>Wireless Accessories</u> - Bluetooth is also available on the Fujitsu Lifebook T901 Tablet Personal Computer© (Bluetooth 3.0) and can be used to wirelessly connect to other Bluetooth ready devices such as printers, PDA's, cell phones, cameras, and headsets. Bluetooth devices are backward and forward compatible, but when connecting a lower version device, the data rate and security is capped by the lowest version.

One-Note - County agencies are also encouraged to consider the use of One-Note® software. The version of the tablet that was purchased for the research study included One-Note® software because, at the time, it was not part of the standard Microsoft Office® package. Since that time, One-Note has been included in both the 2007 and 2010 versions of Microsoft Office®. If counties currently use either of these two versions of Microsoft Office®, or are considering purchasing a standalone version of One-Note® software, information technology staff are encouraged learn more about how One-Note® software can be used with the tablets. Information technology staff can register for the on-line training course Using Your Fujitsu® Lifebook. (More information regarding on-line training was previously noted on pages 11 and 12 of this guide.) Chapter 5 of this of the course will provide a more detailed explanation of One-Note software and the advantages of using the software with the tablets.

In addition to the items identified that will help maximize the use of the tablets, there were some instances during the initial round of distribution, where some of the software or components were removed. Please keep in mind that when doing so, some of the functionality of the tablet may be lost.

In some cases, the removal of the software was a result of decisions made by the administrator and/or the information technology staff. Most often, these decisions were made because of concerns regarding the use of the web-camera. In an

agency has concerns regarding the use web camera, they are encouraged to have an open discussion with caseworkers regarding the concerns and potential benefits of the feature.

# **Using the Web-Camera**

<u>Web-Camera</u> - Caseworkers have found a variety of field uses for the built in camera. One of the most frequently heard comments from caseworkers was that this feature eliminated the need to carry a camera into the home and allowed the caseworker to save the pictures in the case file.

Other caseworkers have reported using the cameras to create picture PowerPoint presentations to show progress made by the family. Typically, this would occur in the context of unclean living environments. In these instances, caseworkers would take "before and after" pictures to illustrate the success of families and to note areas where improvement was still needed.

One county reported using the web-camera, along with wireless internet connection, to access Skype<sup>™</sup> and help bridge physical distances between foster youth and their families.

In addition to the strategic decisions to remove these features, there were times when the web camera was inadvertently removed during the initial set-up process. Most often, this occurred as a result of reformatting the tablets to a new operating system.

Although the tablets were purchased with a Windows 7© operating system, some agencies may have discussions regarding the advantages and disadvantages of reformatting the tablets to earlier versions of the operating system so that all staff within the agency would be using equipment with the same operating system. Prior to making that decision, it is important to understand how various operating systems affect (or don't affect) the functions of the tablets. Two points to consider are listed below.

- Windows 7© and newer editions of Windows© include all of the tablet functionality by default, regardless of what version you are using (Home, Professional, and Ultimate).
- Windows XP© business or professional does not support tablet features such as the pen input, the tablet pc input panel, Windows Journal, Sticky Notes, handwriting recognition and conversion, etc. If the tablets are reformatted using an older operation system, the only way that they functionality of these features can be maintained is by installing the Windows XP© <u>Tablet Edition</u>.

# **Section III – Mobile Printers**

#### A. Mobile Printer Overview

The use of laptops has the potential to free workers from their desks. During focus groups, administrators and many of the workers reported that their desktop computers have been replaced with laptops and docking stations. However, mobility isn't limited to laptops.

Workers and administrators spoke of using several different types of mobile technology in the field such as portable scanners, portable printers, smartphones, iPads©, digital recorders, microphones and cameras. Workers spoke of the benefits of mobile scanners. Mobile printers could be used to in scan, copy and return difficult to obtain documents. The use of mobile printers would also enable caseworkers able to print out copies of plans and other documents immediately and in the family's home.

Based on the feedback from stakeholders, the Office of Children, Youth and Families and the Pennsylvania Child Welfare Training Program researched the products that are currently available. Unfortunately, consumer reviews of the combination mobile printer and scanner were not positive. In addition to being costly, reviews indicated that they were of poor quality and were reported to break down frequently. Based on that information, the decision was made to purchase mobile printers (without the scanner combination). That being said, as the technology improves, counties are encouraged to explore the possibility of combined mobile printers and scanners to support quality visitation practices.

#### B. Canon© Pixma IP100 Mobile Printer:

While there are a variety of mobile printers available, the Office of Children, Youth and Families and the Pennsylvania Child Welfare Training Program selected the Canon© Pixma IP100 to support the needs of caseworkers for a variety of reasons, including:

- It is Bluetooth© compatible with the tablets (which means it can connect wirelessly to the Fujitsu Tablets
- It weighs less than five pounds
- Reviews indicate a general satisfaction by the users who cites its reliability, its convenient design and easy set-up/use.
- Users have also cited a high degree of satisfaction with its fast printing speed, sharp tones and colors and economical ink consumption.

# **Section III – Mobile Printers**

#### C. Mobile Printer Accessories

Additional items that were purchased and included with the mobile printer are listed below.

- <u>Bluetooth© Print Server:</u> The print server will allow the user to print from the tablet wirelessly using Bluetooth© technology.
- <u>Printer Battery:</u> The portable printer battery will allow the printer user to print documents without the need for a power outlet.
- <u>Printer Carrying Case:</u> A special carrying case was ordered for the mobile printer which will allow the user to carry their tablet and mobile printer in one place, instead of two separate carrying cases.

# D. Mobile Printer Setup

Setting up the mobile printer via Bluetooth© only requires four simple steps.

- Insert the Bluetooth© adapter into the printer (after the install, keep in mind that the Bluetooth© adapter must be plugged in for the connectivity to work).
   Follow the instructions in the manual to complete the adapter setup, making sure the device is "discoverable" or "visible".
- 2. Install the printer software on the tablet.
- On the tablet, right-click on the Bluetooth© icon and select the option to add a new connection or device, which will make the computer search for available Bluetooth devices.
- 4. When the printer appears, select it to connect/pair it to the tablet.

# A. Voice Recognition Overview

During the initial stages of the research (Vendor Demonstration Day), county staff expressed an interest in voice recognition software. In particular, they noted the potential benefits related to productivity when completing forms and case notes. At the close of research (focus groups), caseworkers and administrators also addressed potential benefits of using this technology; by itself and in conjunction with the tablets.

Also, during the course of the research, the Office of Children, Youth and Families, along with the Pennsylvania Child Welfare Training Program conducted outreach to gather more information about:

- The current use of Dragon NaturallySpeaking<sup>™</sup> and other voice to text products in county child welfare offices;
- The advantages and disadvantages noted by users of the products and
- Interest in receiving technology to help support the conversion of voice to text.

Overall, the reactions were mixed. While many counties did express interest in receiving and trying Dragon NaturallySpeaking<sup>™</sup> software (or other voice to text products), some counties had tried early versions of similar products and had struggled with effectively using the software. The biggest challenges noted are listed below:

- The cost of the product and the need to upgrade the software to "keep up with technology".
- Many agency computers only met the minimum operating requirements for using the software (not the recommended operating requirements) and therefore use of the program oftentimes slowed down computers and caused frustration.
- Agencies who had previously purchased software found that wide-spread use
  of the technology was not seen in the agency. Rather, only one or two
  workers were actively using the software. Although these workers reported
  being very satisfied with the outcome.
- Use of the voice to text features created additional background noise when people were using the software.
- Background noises interfered with the accurate conversion of voice to text.

Despite the disadvantages noted, many counties still requested the opportunity to try the software. The requests were typically made based on the information listed below.

- New technology has reportedly made the use of the software easier (and background noises cause less interference).
- With increased paperwork demands, this technology may be worth the investment if it increases productivity and worker satisfaction.
- Even if not used agency-wide, this software could be offered to those workers who were interested and comfortable with the technology and/or for workers who did not possess strong typing skills.

Based on the feedback received, 100 Dragon NaturallySpeaking<sup>™</sup> Licenses (Version 11.5) were purchased for counties interested in the technology.

# B. Dragon NaturallySpeaking™ Overview

While all counties who requested voice recognition software will receive support in this area, only some will be receiving Dragon NaturallySpeaking™ licenses. Counties who requested Dragon NaturallySpeaking™ Licenses but who are using Windows 7© on some or all of their agency computers will be receiving headsets (with microphones) to enable them to use the voice recognition feature that exists in computers in their agency that have a Windows 7© operating system. (For more information of use of the voice recognition feature in Windows 7©, please reference Section V of this guide.)

If an agency determines that that they do not have the capacity to use the software, please contact the Pennsylvania Child Welfare Training Program. If not being used, the software can be redistributed to agencies interested in trying the product.

Dragon NaturallySpeaking<sup>™</sup> is another form of voice recognition software. If your tablet is equipped with Dragon NaturallySpeaking<sup>™</sup> software, you have the capability to turn your spoken words into text on the computer. Your voice also opens programs by saying commands, controlling your mouse and opening files. Like any voice recognition software, users need to be aware of the learning time it will take to become familiar with the software. It is a learning curve, but practicing using the software a couple hours a week, will in the long-term hopefully enhance worker productivity.

More information on Dragon NaturallySpeaking™ software, including the minimum operating requirements can be found at: <a href="http://www.nuance.com/dragon/index.htm">http://www.nuance.com/dragon/index.htm</a>.

# C. Dragon NaturallySpeaking™ Installation Instructions

# Maximizing Agency Resources using Dragon NaturallySpeaking™ and Windows 7©

If your county received Dragon NaturallySpeaking™ licenses, they can be loaded onto the tablets. However, since the tablets have the built in voice to text feature (through Windows 7©), it is recommended that the Dragon NaturallySpeaking™ software be installed on other agencies computers that do not currently have the capacity to access the voice to text feature in Windows 7. More information regarding the voice to text features in Windows 7© is located in Section V of this guide.

The Dragon NaturallySpeaking<sup>™</sup> software can be installed on individual laptops, tablets or desktop computers. It can also be installed on a shared network folder accessible by the end user. Regardless of the manner in which it is installed, please only install the number of licenses provided to your county. The number of licenses and the serial number are listed on the disk provided to your county during distribution.

# Installing Dragon NaturallySpeaking™ by DVD:

- 1. Insert the dvd into the tray and follow the installation instructions.
- 2. When prompted, select "run setup.exe"
- 3. Select "I accept the terms in the licensing agreement", and click next.
- 4. Enter the user information, the organization name (your agency), and the serial number (located on the disk), and click next.
- 5. Choose "Typical/Complete" in the setup type screen and click next.
- 6. Click the install button. (The install takes approximately 10-15 minutes.)
- 7. Click finish.

#### Installing Dragon Naturally Speaking© by network:

- 1. First, copy all of the disk contents onto a shared network folder accessible by the end user.
- 2. From the end users workstation, browse to the folder where the Dragon NaturallySpeaking<sup>™</sup> files reside.
- 3. Double click on the "Setup.exe" file
- 4. Follow steps 2-6 listed above.

Additional information on setting up Dragon NaturallySpeaking™, including how to build a shared acronym list can be found at

www.nuance.com/ucmprod/groups/dragon/documents/webasset/nd\_004969.pdf

# D. Maintenance Policy and Helpdesk Support

A maintenance policy was purchased with the Dragon NaturallySpeaking™ licenses. This maintenance policy includes:

- Helpdesk support for end users and information technology staff and
- Software updates as they released by the vendor. These updates will be made available via download or physical media. Additional information regarding a software update and what issues it addresses can be found posted on the vendors website: <a href="http://knowledgbase.nuance.com">http://knowledgbase.nuance.com</a>.

Since the licenses were purchased through the Pennsylvania Child Welfare Training Program, the vendor does require that a liaison be designated to initiate the calls made to the helpdesk. Should you need to contact the helpdesk, you will first need to contact the Pennsylvania Child Welfare Training Program for them to initiate the call. After the call is initiated, the helpdesk can work directly with the county to resolve the issue (including any follow-up calls that are needed).

#### E. Training for Licensed Users

Dragon NaturallySpeaking<sup>™</sup> has been implemented in thirteen states to help caseworkers reduce the amount of time they spend creating reports. From those deployments, Dragon NaturallySpeaking<sup>™</sup> users that have received hands-on, onsite training, typically see a 40-50% reduction in the amount of time they spend on logging case notes, creating court reports or documenting family plans. During training, instructors review the basics of the software as well as tricks and tips for becoming successful Dragon NaturallySpeaking<sup>™</sup> users.

The Office of Children, Youth and Families purchased training and instructional DVD's for all 100 licensed users. A formal training announcement and registration flyer will be sent out by the Pennsylvania Child Welfare Training Program. However, below is a list of the training dates and locations.

- December 7, 2011 (Meadville, PA)
- December 8, 2011 (Pittsburgh, PA)
- December 13, 2011 (Mayfield, PA)
- December 14, 2011 (Norristown, PA)
- January 11, 2012 (Mechanicsburg, PA)

The training is not scheduled to begin until December. This timeline was decided upon based off of the recommendation of Dragon NaturallySpeaking<sup>™</sup> trainers. Administrators and information technology staff are encouraged to use the time prior to training to identify the staff within your agency who will be the licensed user(s) of the software and to ensure that the software is loaded on the user's computer.

#### Additional Notes Regarding the Dragon NaturallySpeaking™ Training

- Each training session has room for twenty licensed users and five informational technology staff (or other agency staff who wish to participate.)
- As indicated, the final training session will be held in Mechanicsburg, however, the training will also be provided through web-ex on that date.
- Licensed users who have the software installed on a mobile device are encouraged to bring the mobile device to training so that they can use the time provided to practice using the software.
- Licensed users who have the software installed on the desktop are also encouraged to attend the training in person.
- All licensed users will also receive an instructional DVD at the time of the training. This DVD can be used by users once they return to their work sites. (In the event that a licensed user is unable to attend any of the training sessions, the instructional DVD's will be mailed to them following the final training session.)

# Section V - Headsets

#### Please Note:

The information in Section V.A is similar to the information presented on Section IV.A.

This information is similar because of the similarities related to the use of each product; each of which provides the users with access to voice to text features using their computers.

# A. Voice Recognition Overview

During the initial stages of the research (Vendor Demonstration Day), county staff expressed an interest in voice recognition software. In particular, they noted the potential benefits related to productivity when completing forms and case notes. At the close of research (focus groups), caseworkers and administrators also addressed potential benefits of using this technology; by itself and in conjunction with the tablets.

Also, during the course of the research, the Office of Children, Youth and Families, along with the Pennsylvania Child Welfare Training Program conducted outreach to gather more information about:

- Current use of Dragon NaturallySpeaking<sup>™</sup> and other voice to text products in county child welfare offices;
- Advantages and disadvantages noted by users of the products and
- Interest in receiving technology to help support the conversion of voice to text.

Overall, the reactions were mixed. While many counties did express interest in receiving and trying Dragon NaturallySpeaking<sup>™</sup> software (or other voice to text products), some counties had tried early versions of similar products and had struggled with effectively using the software. The biggest challenges were:

- The cost of the product and the need to upgrade the software to "keep up with technology";
- Many agency computers only met the minimum operating requirements for using the software (not the recommended operating requirements) and therefore use of the program oftentimes slowed down computers and caused frustration;

# Section V – Headsets

- Agencies who had previously purchased software found that wide-spread use
  of the technology was not seen in the agency. Rather, only one or two
  workers were actively using the software. Although these workers reported
  being very satisfied with the outcome;
- Use of the voice to text features created additional background noise when people were using the software and
- Background noises interfered with the accurate conversion of voice to text.

Despite the disadvantages noted, many counties still requested the opportunity to try the software, reasons for requesting the software included:

- New technology has reportedly made the use of the software easier (and background noises cause less interference);
- With increased paperwork demands, this technology may be worth the investment if it increases productivity and worker satisfaction and
- Even if not used agency-wide, this software could be offered to those workers
  who were interested and comfortable with the technology and/or for workers
  who did not possess strong typing skills.

### B. Using the Headset with Windows 7©

While all counties who requested voice recognition software will receive support in this area, only some will receive Dragon NaturallySpeaking™ licenses. Counties who requested Dragon NaturallySpeaking™ licenses but who are using Windows 7© on some or all of their agency computers received headsets (with microphones) to enable them to use the voice recognition feature that exists in computers in their agency that have a Windows 7© operating system. This voice recognition feature uses almost all of the same commands as Dragon NaturallySpeaking™ and Windows 7© also recognizes the common names and phrases used in other documents stored on the computer.

Individuals using computers using a Windows 7© operating system can access the speech recognition feature by plugging in speech recognition headphones. The speech recognition feature enables users to use their voice to control their computer. The feature allows users to run programs and say commands, as well as dictate and edit text. Using the Windows 7© voice recognition feature is a time saving tool but

# Section V – Headsets

does require patience while learning the commands associated with using the voice to text feature. It is a learning curve, but practicing a couple hours a week, will in the long-term hopefully enhance worker productivity.

# C. Recommended Resources for Headset Users and Informational Technology Staff

Because the voice to text feature is built into the operating system, there is very little set up needed to begin using the feature. In many cases, the user may even be able to begin using the feature without the assistance from informational technology staff, using the tutorial provided in Windows 7©.

However, there are a few steps that users and informational staff will want to make sure they are aware of in order to receive the best results when using the built in voice recognition software with Windows 7©.

- The first thing is to plug in the provided headset, open up the Control Panel, and double click on the *speech recognition* icon. Make sure the microphone is set up correctly by selecting set up microphone and following the prompts.
- After setting up the headphones, the user should open the voice recognition feature and read the text provided. This step helps to "train the computer" to understand the users speech patterns and dialect.
- When dictating text, the user should attempt to pronounce words correctly
  while maintaining fluid speech. The feature, when unsure of a word or phrase,
  will attempt to provide the correct word by analyzing its context.
- Correct mistakes before carrying on to the next sentence or paragraph. If the software has made a mistake, it may repeat that mistake the next time the word or phrase is used. Corrections can be with your mouse and keyboard, however using the voice feature to correct mistakes will improve the accuracy of commands and dictation at a faster rate
- Maintaining microphone positioning when using the voice recognition software is also important.

# Section V – Headsets

While there is no formal training being provided at this time, there are some websites and tutorials that have been reported as being helpful for users. Below is a list of recommended resources for using Windows 7 © voice recognition feature as it relates to the most frequently asked questions.

- What Can I Do With Speech Recognition?
   <a href="http://windows.microsoft.com/en-us/Windows7/What-can-I-do-with-speech-Recognition">http://windows.microsoft.com/en-us/Windows7/What-can-I-do-with-speech-Recognition</a>
- Speech Recognition Tips and Tricks
   <a href="http://speechwreck.blogspot.com/2010/08/using-windows-7-speech-recognition.html">http://speechwreck.blogspot.com/2010/08/using-windows-7-speech-recognition.html</a>
- Setting Up And Using Speech Recognition In Windows Seven With Tips For Increasing Its Accuracy

http://www.notascoolasitseems.com/review/setting-and-using-speech-recognition-windows-seven-tips-increasing-its-accuracy

Additional tips and information on voice recognition can be found at:

http://h71036.www7.hp.com/hho/us/en/pclc/articles/windows7-voicecontrol.html

http://www.notascoolasitseems.com/review/setting-and-using-speech-recognition-windows-seven-tips-increasing-its-accuracy

http://www.ehow.com/how\_2175779\_set-up-speech-recognition-software.html

# **Appendix A**

**Service and Support Information** 



# We Are Where You Are

From a sales person on the road connecting a Tablet PC to a hotel network, to a Fortune 500 corporation launching their new IT consolidation initiatives—we are where you are, meeting your organization's entire spectrum of IT requirements.

#### The Challenge

The complexity of your IT infrastructure keeps growing, encompassing everything that computes, despite your attempts at consolidation and simplification. In such an environment, how can you be sure your IT initiatives will deliver a solid return on investment, increase productivity, improve performance and availability, and enable an infrastructure that is capable of rapidly adapting to your ever-changing business environment? Even though these are very complex issues, their resolution can be quite uncomplicated.

#### **Fujitsu**

As the world's third largest IT services provider, Fujitsu focuses on keeping IT and business objectives aligned through close collaboration with our customers. The cornerstone of our business is Mission Critical Support delivered by experienced engineers and backed by an ISO 9001 certified Global Service Center that operates 24 hours a day, 7 days a week, 365 days a year. For over 30 years Fujitsu has provided IT infrastructure services and support to some of the world's largest, most successful corporations.

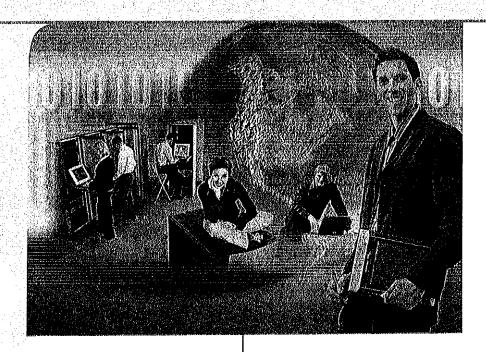
#### Accessible

Close collaboration means being geographically convenient. The Fujitsu network of open service areas across North America allows us to quickly deploy technicians and spares for prompt troubleshooting and repair. For global corporations, Fujitsu has over 65,000 service representatives worldwide, ready to apply their expertise to whatever your IT requirements may be.



"I really like the service organization. They're top quality people who are there to support the customer. Fujitsu makes it easy for me to do business."

Tad Hamilton Director of IT Cellular South



"In order to accomplish our growth, we needed a scalable system backed by quality service and support, all of which we have found in Fujitsu."

Evan Jafa, Chief Technology Officer for First American RES.

## **Well Aligned**

Bolstered by the synergy of our affiliations, Fujitsu continues to be a dominant force in the IT services arena. By collaborating with Sun, Microsoft, Oracle, EMC, VERITAS, SAP, and many other top providers in their respective industries, we are able to offer outstanding value and a range of well integrated, customized solutions.

Global Alliances with leading hardware and software vendors are maintained by Fujitsu to bring you the best possible IT solutions to your business needs. By working alongside these vendors, we are able to create and maintain reliable, profitable IT infrastructures for our customers.

Mobile Alliance value added solutions give Fujitsu the ability to offer the industry's most complete range of mobile solutions. Designed to effortlessly access and share information in a highly mobile environment, Fujitsu has long provided leading mobile computing products to organizations implementing work force mobility solutions.

# End to End Service and Support

We are committed to long-term relationships with our customers, collaborating to meet business needs with technology expertise and best practice methodologies. Fujitsu mission critical ITIL compliant infrastructure services are also ISO 9001 and Microsoft certified.

Our customer-centric service matrix has (and continues) to evolve, enabling Fujitsu to provide the best service and support possible. Organized into four main focus areas, our service matrix includes: Fujitsu Product Maintenance Services, Professional Services, Operational Services, and Multi-Vendor Support.

# Fujitsu Product Maintenance Services (For Fujitsu Products)

### **Server and Legacy Products**

The Fujitsu core competencies in world class service and support encompass the entire enterprise, including distributed computing environments.

#### Premium and Enhanced Service

Fujitsu offers Premium and Enhanced Service to support the operational objectives of the most demanding mission-critical environments. With these services, your business is linked to Fujitsu, 24 hours a day, 365 days a year. Our onsite response times of 2 or 4 hours (Premium and Enhanced respectively), are available in defined major metropolitan service areas. These services are offered as warranty uplifts and as post-warranty support services.

#### Basic Service

The Basic Service level is for servers with less stringent support needs, requiring coverage during regular weekday operating hours. This service provides onsite coverage, Web, and telephone support, and can be enhanced with operational service options for an additional fee. This service is offered as a warranty uplift and as a post-warranty support service.

#### Standard Warranty-North America\*\*

The warranty period, hardware and software telephone assistance/response times and onsite coverage hours/response times are all model dependent. We recommend the selection of an appropriate Warranty Uplift Offering, according to your day to day needs.

Warranty offerings vary by country, check with your country Fujitsu business manager, as well as your agreement to purchase the hardware and ficense the software.

### **Mobile Products**

For companies that have purchased Fujitsu notebooks and tablets, we provide a full spectrum of services that include onsite support, depot repair programs, and operating system and hardware support.

Extended Warranty\* extends the one-year International Limited Warranty up to five years.

Screen Damage Protection Plan\* provides a Limited Warranty against any defects in screen materials and workmanship.

Executive Mobile Service\* is available for Tablet PCs with active digitizers. This "premier" warranty program will provide you onsite warranty service, as soon as the next business day.

Fujitsu Software Consulting
Services can enhance your most
popular and productive applications
such as porting your applications to
Fujitsu pen enabled notebooks and
tablets and making them "pen-friendly."
We also provide pen programming
services to assist in troubleshooting,
debugging, GUI enhancements, demo
design, and more. Fujitsu software
consultants are fully trained on the new
Microsoft Windows XP Tablet PC
software and the .NET platform for
smooth, seamless results.

Solution Integration Services will help you integrate third party peripherals so all parts of your technical landscape can work together. This service includes packaging and mechanical design, wireless network integration, and driver modification and/or enhancement.

Product Training experts can put together a package of services to address your needs, including "Help Desk" training, "Train the Trainer" services, and end-user training.

Customized Consulting Programs, gives us the power to design a customized package of technical consulting services to meet your specific needs.

\*Subject to International Limited Warranty terms and conditions.

Fujitsu Hardware and Software Bundling Service provides for the construction of a high-quality, cost-effective solution to meet your exact bundling requirements; from monitors, printers, and bar code scanners to digital cameras, USB adapters, and vehicle mounts.

Software Image Management Service is the simplest and easiest way to improve end-users' productivity. You can receive your shipment of Fujitsu mobile products "ready to go." By using the Fujitsu Software Management Service, your IT people can focus on initiatives that will make the biggest contribution to your organization's success.

# Fujitsu Professional Services

The time and expense associated with deployment, maintaining optimal performance, and the management of your infrastructure is claiming an everincreasing share of IT costs, and ultimately your business. Fortunately, these burdens can be reduced with expert professional services from Fujitsu.

PRIMEPOWER QuickStart service can configure your PRIMEPOWER server for the utmost in availability, scalability and optimization.

PRIMERGY Blade Server QuickStart will extend the value of your Fujitsu PRIMERGY investment, through site preparation, installation and turnover service.

# Fujitsu Operational Services

With the Fujitsu Operational Services offerings, our goal is to optimize your existing IT assets, enhancing your return on investment.

Server Consolidation will simplify your IT Operation by combining compatible workloads into more efficient configurations that save time, money and effort. Fujitsu supports major vendor operating systems including Solaris, AIX, and HPUX as well as Microsoft Windows, SUSe, and RedHat Linux platforms. Data Backup Design and Implementation will analyze, document, design, and deploy the most effective backup/archive/restore strategy for your environment, integrating all components into a turnkey solution.

Data Center Relocation encompasses solution development, project management, as well as the Physical Relocation of large enterprise data centers meeting the needs and schedules of our customers.

Dynamic Reconfiguration
Automation Service provides a quick
and consistent method for configuring and
implementing Dynamic Reconfiguration
on your PRIMEPOWER Servers.

High Availability Application Assessment Service examines your IT application infrastructure and determines your strengths and vulnerability points.

Operations Availability Assessment is a systematic approach to assessing your use of the technology, people, and processes in your UNIX based data center operations.

Performance and Tuning will give you an in-depth technical analysis of your PRIMEPOWER or PRIMERGY servers with recommendations to improve your system performance.

PRIMEPOWER Cluster Implementation Service is designed to support the deployment of a high availability cluster with either PRIMECLUSTER software from Fujitsu or VERITAS Cluster Server<sup>16</sup> software.

Solaris Data Migration is one of the most efficient and reliable solutions for customers requiring data migration for new or existing Solaris based systems.

User Data Migration is an efficient and reliable solution for customers requiring data migration for new or existing Windows based systems.

# Fujitsu Multi-Vendor Support

With our highly evolved expertise in multi-level, cross-platform IT infrastructure service and support, Fujitsu has extended its direct support capabilities to a variety of OEM platforms, such as Sun, IBM\*, and HP products. Fujitsu field engineers not only provide the fundamental knowledge required to support the OEM platforms, they also deliver innovative support options and OEM spares. This skill mix is ideal for N-1 generation equipment, since most environments that Fujitsu field engineers support have a mixedage and mixed-platform install base.

You can leverage the Fujitsu support infrastructure across your enterprise, confident that you have a single point of contact and accountability. Fujitsu can create a custom support package for you, factoring in such features as response time, support levels, and budgetary considerations.

"I didn't want to have to call multiple vendors for support...With Fujitsu, we get everything we need, regardless of the nameplate on the box"

Doug Cummings, senior director of technology operations at America West, in Tempe, Ariz.

# World-class Online Support for all of our computer offerings.

For quick access to everything from frequently asked questions to driver downloads, our notebook and tablet Web support is easy to navigate and intrinsic to use. For our server customers we provide technical material, downloads, and contact information for all our server products.



**Fujitsu Computer Systems Corporation** 

1.800.831.3183 us.fujitsu.com/computers

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# Cross Platform

Most IT infrastructures are heterogeneous environments. That is why our deep technical expertise encompasses the platforms found in most enterprises. We provide flexible, customized support solutions for a variety of products including but not limited to:

OEM	Product Type	Device Numbers
Pojitsu	Mobile	Notebooks, PDA's, Tablets
Fujilsu	Intel Servers	All PRIMERGY models
Fujitsu	Solaris Servers	All PRIMEPOWER models
Fujitsu / Amdahi	Mainframe Servers	Millannium, 400, 500, 700, 800, 1000, 2000, 2100
Fujitsu / Amdahl	DASD	LVS Storage Products 2900, 4800, 4900, Spectris, SP100, SU100, SP200, SU200, SP300, SP400
Fujilsu / Amdahl	Communication Units	4745
SUN	Servers and Workstations	All Products
SUN	Storage	All products except Sun labeled HDS storage
НР	Servers and Workstations	(1) All HP0000/800 servers (A.D.E.F.G.H. I.K.L.R.N.T and V class systems) EXCEPT Superdome, (2) All HP9000/700 workstations (700 series workstations - 7KX.J.B; and C class workstations).
HP	Storage	All HP Storage Devices except XP series (48,266,512, and 1024) and DLT autoloaders and libraries
IBM	UNIX Servers	RS 6000: 7008, 7009, 7010; 7011, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7020, 7024, 7025, 7026, 7027, 7030, 7043, 7044, 7248, p8XX, 88XX, A8400
IBM	Intel Servers	xseries: x20x, x30x
IBM	Mainframe Servers	. 7060, 9021, 9076, 9121, 9221, 9672, zseries : 2064/2066
JBM	DASD	2104, 2105, 3380, 3390, 3880, 7131, 7133, 7134, 7135, 7137, 7203, 7204, 8331, 9332, 9333, 9334, 9337, 9345, 9390, 9391, 9392, 9394, 9395
IBM.	Таре	2440, 3420, 3430, 3450, 3480, 3490, 3590, 3803, 7204, 7206, 7207, 7208, 7331, 9346, 9347, 9348.
IBM	Libraries	3494, 3495
İBM	Other	A variety of Subsystem control units: Communications: Monitors, Multiplexers, Switchas, Remote C.U., Graphics Systems, Directors, Converters, Sysplex Timers, Optical Storage
EMC	Storage	3xxx, 5xxx, 48xx, 8xxx, FC4500, FC4700, IP4700, FC5300

# Appendix B How to Get Service

# **Fujitsu PC Corporation Notebook Repair Process**

1. General FujitsuPC Support Line

1-800-8FUJITSU (1-800-838-5487)

End User support for Fujitsu Notebook, Pen Tablet, or Tablet PC products.

Hours of operation: 7x24x365

Provides English and French Canadian technical support.

2. Corporate Help Desk

1-800-36FUJITSU (1-800-363-8548)

This is a helpdesk to help-desk support line and does not take calls from end users.

Access is via PIN #.

Hours of operation: 8:00AM – 5:00PM CST

Monday – Friday

3. Reseller Support

1-800-838-5487 (1-800-838-5487)

Fujitsu PC reseller (ASP/ASC) support line.

Access is via PIN #.

Hours of operation: 7:00AM – 7:00PM CST

Monday - Friday

4. Executive Mobile Support

1-800-FUJITSU (1-800-838-5487)

Customers with products covered by Executive Mobile Support should call

800-838-5487, select option 1, then option 2. Hours of operation: 8:00AM - 5:00PM CST

Monday - Friday

5. Premium Care

1-866-756-8628

Technical support line for Fujitsu Premium Care customers. Products supported are Fujitsu PC laptops, Pen Tablets and Fujitsu Siemens Desktops, Mobile and Desktop Workstations, Servers, and Storage devices.

Access is via PIN #.

Hours of operation: 7x24x365

6. Fujitsu PC Repair Depot

Address:

Fujitsu PC

5170 E. Raines Road Memphis, TN 38118

# **Fujitsu PC Corporation Notebook Repair Process**

## 7. Process to request RMA:

To initiate a repair RMA for a unit;

Please call the appropriate Fujitsu number above. You will be given an RMA #. You can send the unit to the E. Raines Road address. Please be sure to put the RMA # as part of the ship-to information on the outside of the box. Do not send any AC power supplies, batteries, or any other peripherals. Make sure that your CD drive and PCMCIA slot do not have anything in them.

When calling for an RMA, please be ready to supply the following information:

- ? Serial Number (located on the bottom panel of the unit
- ? Configuration
- ? Problem Description

Turnaround time is an average of 3-5 days business after receipt in Memphis. We ship the units back via FedEx standard overnight (may be two days for Alaska, Hawaii and Puerto Rico).

# **Appendix C**

**Fact Sheet – Standard Warranty** 



# FACT SHEET FUJITSU AMERICA LIFEBOOK® STANDARD INTERNATIONAL LIMITED WARRANTY NOTEBOOKS, MINI-NOTEBOOKS AND TABLET PCS

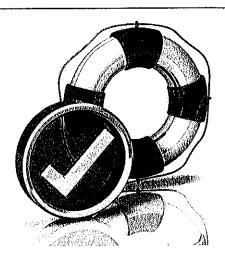
Fujitsu America, Inc. (FAI) is proud to announce our new LIFEBOOK Standard International Limited Warranty program for our notebooks, mini-notebooks, and Tablet PCs.

#### WARRANTY COVERAGE:

Warranty coverage commences from the date you purchased the Product. Please retain your sales or delivery receipt along with the warranty information. FAI warrants the Product against defects in material or workmanship under normal use for the applicable warranty period ("Warranty Period"), beginning from the date of original purchase by original Purchaser. If the Product becomes defective during the Warranty Period, FAI will, at its option and without charge, repair the Product with new or reconditioned components or parts, or replace the Product with a new or reconditioned Product of the same or functionally equivalent model. All shipping costs in regards to shipping the unit to the FAI repair depot and return shipping to the customer will be the responsibility of FAI. The FAI responsibility begins with receipt of the unit at the FAI Depot.

## HOW IS THE REPAIR/REPLACEMENT HANDLED?

If an incident occurs, the customer should call the Fujitsu America technical support line (800-8FUJITSU) to report the problem. Select the appropriate option that applies to the product you need serviced. Fujitsu technicians will ask a series of questions designed to determine the extent of damage or failure. Depending on the system type, the cause and extent of the damage, and other service options that have been purchased, Fujitsu will then initiate the appropriate repair service. Once your RMA number has been provided to you, the Fujitsu technician will then provide instructions for returning your Product to our repair depot. There are two options that will be provided to the customer. The first is called the Easy Return Solution in conjunction with Federal Express. The FAI technician will provide the customer with a FedEx RMA number which is the same as the FAI RMA number with FEX in front of it. They will then provide to the customer the closest FedEx Office or FedEx location for the customer to drop off their boxed unit. The second option is for FAI to create a FedEx return label and email to the customer who can then box their unit and either cal FedEx for a pickup or drop off at the nearest FedEx location.



#### LIMITATIONS:

This warranty statement for the Product and the Software is in lieu of all conditions or warranties express, implied or statutory including but not limited to any implied conditions or warranties of merchantability or fitness for a particular purpose on the part of Fujitsu America, Inc., its suppliers or its Authorized Service Providers. All implied or statutory warranties to the extent that they cannot be excluded are limited to the effective period of the express warranty set forth herein.

Fujitsu warrants that the hardware product, purchased from Fujitsu or from an authorized Fujitsu reseller by the original purchaser, is free from defects in materials and workmanship under normal use. If the product is defective in materials or workmanship, your sole and exclusive remedy shall be repair or replacement as provided above. However if the remedy fails of its essential purpose, FAI reserves the right to refund the purchase price of the product to the purchaser in exchange for the return of the product.

FAI, its suppliers, and its Authorized Service Providers shall not be liable for any damages including, but not limited to, direct, indirect, incidental or consequential damages, loss of use or data, loss of profits or interruption of business, whether such alleged damages are based in warranty, tort (including negligence and strict liability, but excluding personal injury), contract, or indemnity, except to the extent prohibited by law.

### FACT SHEET STANDARD INTERNATIONAL LIMITED WARRANTY

This is the exclusive written limited warranty of the original purchaser. This Fujitsu America, Inc. warranty program is valid only for products purchased in North, Central, and South America. Damage caused by the use of any writing tool or other instrument not specifically designed for use with the product.

#### **ABOUT FUJITSU AMERICA**

Fujitsu America, Inc. is a leading ICT solutions provider for organizations in the U.S., Canada and the Caribbean. Fujitsu enables clients to meet their business objectives through integrated offerings including consulting, systems integration, managed services and outsourcing for enterprise applications, data center and field services operations, based on server, software, storage and mobile technologies. Fujitsu provides industry-oriented solutions for manufacturing, retail, healthcare, government, education, financial services and communications sectors.

For more information, please visit: http://solutions.us.fujitsu.com/

**FUJITSU AMERICA, INC.** 

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# **Appendix D**

**Fact Sheet – Accidental Damage Protection** 



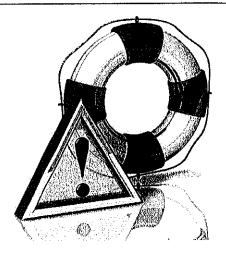
# FACT SHEET FUJITSU AMERICA LIFEBOOK® ACCIDENTAL DAMAGE PROTECTION PROGRAM NOTEBOOKS, MINI-NOTEBOOKS, AND TABLET PCS

Fujitsu America announces the most comprehensive Service Plan for our mobile products. This new program covers unintentional, accidental damage during the warranty period. Accidental damage is defined as physical damage to a Product caused by, or resulting from, an unintentional mishap. This program is available for all Notebooks, Mini-Notebooks, and Tablet PC's sold by Fujitsu America and is valid only in the United States and Canada. Our LIFEBOOK Standard International Limited Warranty program is also included.

WHAT KIND ON DAMAGE IS COVERED?	
Some examples of non-intentional damage that are cov-	ered include:
Cause of Failure	Resolution Description
Liquid spilled on or in unit	Repaired or unit replaced
Drops, falls, and other collisions	Repaired or unit replaced
Electrical Surge	Repaired or unit replaced
Damaged or broken LCD due to drop or fall	Repaired
Accidental breakage (multiple pieces)	Repaired or unit replaced
Damages caused by intentional acts, fire, theft, or loss	are NOT covered under the
LIFEBOOK Accidental Damage Protection plan. Some ex	camples of damage that would
NOT be covered are:	
Cause of Failure	Resolution Description
Damaged in a fire	Not covered
Intentional damage (e.g., hammer marks)	Not covered
Theft	Not covered
Toxic or contaminate spill	Not covered
Normal Wear (not affecting system performance)	Not covered
Accessories (batteries, pens, etc)	Not covered
Terrorism/War	Not covered
Unauthorized attempts to repair the unit	Not covered

#### HOW IS THE REPAIR/REPLACEMENT HANDLED?

If an incident occurs, the customer should call the Fujitsu technical support line to report the problem (800-8FUJITSU). Fujitsu technicians will ask a series of questions designed to determine the extent of damage or failure. Depending on the system type, the cause and extent of damage, and other service options that have been purchased, Fujitsu will then initiate appropriate diagnostic or repair services. The machine will generally be returned to a designated Repair Center where the necessary parts and materials will be installed. Fujitsu will, upon completion of the repair, return the unit to you. Should a replacement machine be determined to be the appropriate action by Fujitsu, you will be notified, and a replacement product of the same or equivalent configuration will be provided.



#### LIMITATIONS:

The Fujitsu LIFEBOOK Accidental Damage Protection Program allows repair activity on a yearly basis – dependent upon your contract length. Limitations of the program include a one time per year repair/replacement of major parts. "Major parts" include, but are not limited to: the screen (LCD), DVD/CD ROM, hard disk drive, memory, CPU, and Motherboard. Subsequent replacement of these parts will be subject to a Fujitsu Flat Rate Fee for repair. Non-major parts are NOT limited to one time per year. Peripheral devices or components such as (without limitation) docking stations, external modems, external speakers, game devices, carrying cases, secondary monitors, external mice, external keyboards, power/ AC Adapters and other components not internal to the Computer Device are NOT included in this program. Cosmetic damage (scratches, wear, and discoloration) not affecting functionality is also NOT COVERED.

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