



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
T5010 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 cwvisit@pitt.edu. 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 T5010 Model)

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Section I - Background Information

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.

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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.

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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.

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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. These included:

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- 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.

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Research Findings/Lessons Learned #2

Engaging Families/Use of Tablets with Families - 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.

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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.

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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 additional tablets, mobile printers, voice recognition software and headsets to enable use of existing voice recognition features in county computers.

Section II – Lifebook T5010 Tablet Personal Computer ©

A. Tablet Overview

One of the frequency 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 a signature pad feature.
- In addition to the components listed above, these tablets were purchased with Windows XP© as the operating system. Using Windows XP© operating system with the configuration of the tablets (T5010 model) provides additional benefits as they relate to input devices, software and hardware of the tablet. A big advantage seen by stakeholders was how the tablet specifications enhance the use of the OneNote© program.

OneNote©

On its own, OneNote© is designed for collecting, organizing and sharing possibly unpolished materials. It allows users to create electronic versions of familiar hard copy “tabbed ring binders”. When this software is used in conjunction with the tablets, caseworkers can hand-write comments in completed documents and take other actions so that they can organize, manage and view these documents, just as they might a hard copy a client’s file.

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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© T5010 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 three forums currently identified are:

1. Tablet Orientation and Usage Guide
2. Online Training
 - “Using Fujitsu Lifebook”
 - “Youth and Family Engagement and the Use of Technology”
3. Quarterly Meetings (via web-ex)

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While these three 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.

1. Tablet Orientation and Usage Guide

Lifebook T5010 Tablet Personal Computer© users are being provided a copy of the Pennsylvania Child Welfare Caseworker Tablet Orientation and Usage Guide. This is the same guide which was provided to caseworkers who participated in the original Mobile Technology Research Project during their initial training session.

Electronic copies of the guide are not available but hard copies were distributed to counties with the tablets. The guide should be, in turn, distributed to caseworkers with the tablets. The content includes:

- Tablet key benefits related to caseworker duties;
- Information on how to use your Fujitsu Lifebook T5010 Tablet Personal Computer©;
- OneNote© allows to organize and manage files electronically as they would a client's hard copies file. Pictures can be embedded into the file and handwritten notes can be inserted into the document.
- and much more!

2. On-line Training

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.

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On-line Training Course Descriptions

Using Your Fujitsu© Lifebook: 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>.

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3. 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 tablets being distributed in 2011 were purchased at the same time as the tablets purchased for the mobile technology research project and, therefore, the Extended Quality Care Warranties for all tablets remain in effect until September 8, 2012.

CONTACTING FUJITSU

Web-site: us.fujitsu.com/computers

Phone:
1.800.8FUJITS

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

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Copies of the warranties and other related documents are contained as appendices to this guide.

- Appendix A: Service and Support Information
- Appendix B: How to Get Service
- Appendix C: Warranty-Notebooks
- Appendix D: Quality Care-Notebooks

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 cwvisit@pitt.edu 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.

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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: <http://office.microsoft.com/en-us/buy/office-product-key-card-frequently-asked-questions-HA101847520.aspx>
- 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 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.

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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.

Caseworker Feedback from the Mobile Technology Research Project

While the use of the tablets varied based on the type of support received and individual preferences/comfort levels with technology, access to forms and electronic case files were a widely discussed topic during the focus groups and other forums where the caseworkers had the opportunity to discuss their experiences using the tablets.

Caseworkers generally appreciated the freedom afforded to them by use of the mobile technology. Unexpected free time (court delays, cancelled appointments) often times resulted in opportunities to catch up documentation. Additionally, caseworkers reported completing paperwork with families during visits and e-mailing the documents to supervisors on-site. In some cases, signatures for stipend approvals and other documents were received while still in the family’s home.

F. Preparing for Distribution to Caseworkers (Web-Camera and One-Note©)

During the initial round of distribution, some of the software or components were removed. Please keep in mind that when doing so, you might lose some of the functionality of the tablet.

In some cases the removal of the software was a result of decisions made by administrators and/or information technology staff. Most often, these decisions were

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made because of concerns and uncertainty regarding use of web camera and the One-Note© software. If an agency has concerns regarding the use of either of these features, they are encouraged to have an open discussion with caseworkers regarding the concerns and potential benefits of the features.

Using the Web-Camera

Web-Camera - Caseworkers have found a variety of field uses for the built in camera. One of the most frequently heard comments was that, when needed, they could take pictures using the tablet and, therefore did not have to carry a camera into the home with them, they typically were able to use the tablet.

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™ and help bridge physical distances between foster youth and their families.

Using the One-Note©

One-Note© - 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.

In the case that One-Note© is uninstalled and the user wishes to have it back, the tablet will either need to be restored to its factory settings, or a copy of One-Note© will need to be purchased as either a standalone version, or bundled with Microsoft Office© 2007/2010.

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

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Although the tablets have been purchased with a Windows XP© Tablet Edition operating system, some agencies may have discussions regarding the advantages and disadvantages of reformatting the tablets using a new operating system. When making the final decision it is important to note that the Windows XP© Tablet Edition provides for the functionality of many of the tablet features.

- 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.
- 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).

G. 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 a variety of strategies to help protect data. These strategies included the use of the tablet fingerprint sensor, the use of the Computrace© software and the use of encryption software.

Fingerprint Sensor – 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.

Encryption Software - 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©.

Section II – Lifebook T5010 Tablet Personal Computer ©

Computrace© - Computrace© is a piece of software that can be installed on the mobile devices so that if one is stolen, it can be retrieved, frozen, and/or the sensitive data on the machine can be deleted remotely.

COMPUTRACE EXPIRATION DATE

The Computrace© software and service was purchased at the same time as the tablets purchased for the mobile technology research project and, therefore, the software and service has an expiration date of August 11, 2012. If counties wish to continue to use Computrace© after the expiration date, they will need to do so at their own cost.

COMPUTRACE HELPDESK AND SUPPORT

If you have any difficulties in installing the software, please contact Computrace© support at

1-888-999-985

or

techsupport@absolute.com.

For Computrace© Installation Instructions, please reference *Appendix E: Installation Guide: 800 Series*.

The Computrace© software must only be installed on the tablets that were issued by the Department of Public Welfare, Office of Children, Youth and Families. During the installation process, the tablet must have the ability to connect to the internet, so that the Computrace agent can register with the server.

In the case that a tablet with Computrace© installed on it is stolen; a police report must be filed immediately. After filing the police report, you must contact one of the data delete administrators with the police report number and have the tablet serial number handy. After this contact is made, the data delete administrators will then institute a remote freeze of the tablet for two weeks (meaning the tablet will be locked and cannot be used by anyone).

After the two week period is up, the data delete administrator will contact the person who filed the report.

1. If the tablet has not been recovered, the data delete administrator will first unfreeze the tablet, and then institute a remote deletion of all data on the hard drive.
2. If the tablet has been recovered, the data delete administrator will unfreeze the tablet.

Section II – Lifebook T5010 Tablet Personal Computer ©

It is very important that all data on the tablets is backed up locally on a regular basis. If a tablet is stolen, and the remote data delete is instituted, the data on the tablet cannot be recovered.

The data delete administrator contact information and availability is as follows.

Monday-Friday 8am-4pm

Primary Contact

Name: Barbara Cek

Phone: 717-214-3812.

Email: c-bcek@pa.gov

Back-up Contact

Name: Gloria Sipe

Phone: 717-783-4582

Email: gsipe@pa.gov

Weekdays after 4pm and weekends

Primary Contact

Name: Alizabeth Dively

Phone: 717-645-8684

Email: aldively@pa.gov

Back-up Contact

Name: Joy Crimmel

Phone: 717-460-0876 (cell) or 717-238-7037 (home)

Email: jcrimmel@pa.gov

Section II – Lifebook T5010 Tablet Personal Computer ©

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.

Docking Stations - 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).

Wireless Accessories - Bluetooth is also available on the Fujitsu Lifebook T5010 Tablet Personal Computer© (Bluetooth 2.0) 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.

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 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 cite 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.

- Bluetooth® Print Server: The print server will allow the user to print from the tablet wirelessly using Bluetooth® technology.
- Printer Battery: The portable printer battery will allow the printer user to print documents without the need for a power outlet.
- Printer Carrying Case: 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.

1. 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.
3. 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.

Section IV – Dragon NaturallySpeaking™ Software

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™ 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™ 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.

Section IV – Dragon NaturallySpeaking™ Software

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™ 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™ is another form of voice recognition software. If your tablet is equipped with Dragon NaturallySpeaking™ 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: <http://www.nuance.com/dragon/index.htm>.

Section IV – Dragon NaturallySpeaking™ Software

C. Dragon NaturallySpeaking™ Installation Instructions

The Dragon NaturallySpeaking™ 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™ 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

Section IV – Dragon NaturallySpeaking™ Software

regarding a software update and what issues it addresses can be found posted on the vendors website: <http://knowledgebase.nuance.com>.

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™ has been implemented in thirteen states to help caseworkers reduce the amount of time they spend creating reports. From those deployments, Dragon NaturallySpeaking™ 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™ 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™ 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.

Section IV – Dragon NaturallySpeaking™ Software

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™ 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™ 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?
<http://windows.microsoft.com/en-us/Windows7/What-can-I-do-with-Speech-Recognition>
- Speech Recognition Tips and Tricks
<http://speechwreck.blogspot.com/2010/08/using-windows-7-speech-recognition.html>
- 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.

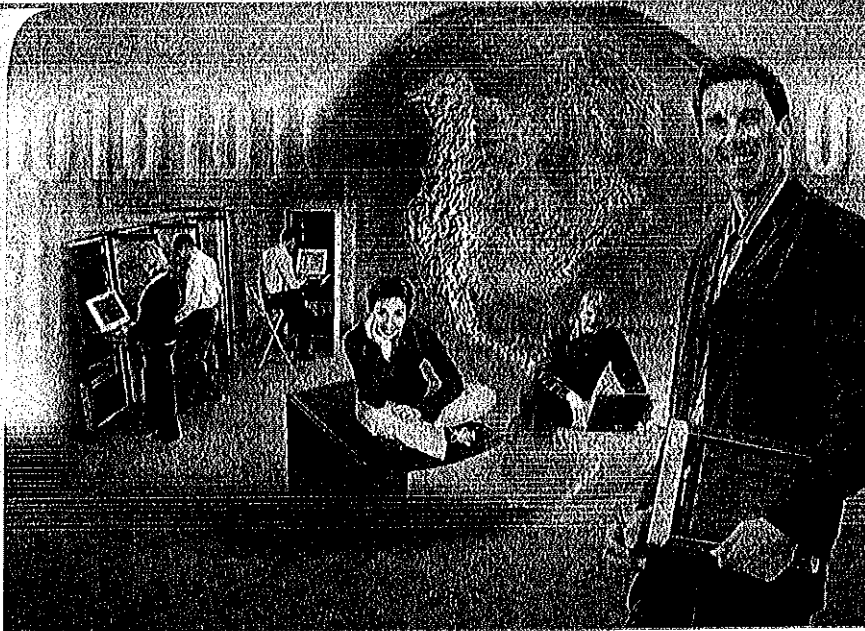
Accessible

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 license 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.

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 ever-increasing 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 HP-UX 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™ 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.

*Subject to International Limited Warranty terms and conditions.

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 mixed-age 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.



Fujitsu Computer Systems Corporation

1.800.831.3183
us.fujitsu.com/computers

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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.

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
Fujitsu	Mobiles	Notebooks, PDA's, Tablets
Fujitsu	Intel Servers	All PRIMERGY models
Fujitsu	Solaris Servers	All PRIMEPOWER models
Fujitsu / Amdahl	Mainframe Servers	Millennium, 400, 500, 700, 800, 1000, 2000, 2100
Fujitsu / Amdahl	DASD	LVS Storage Products 2900, 4800, 4900, Spectris, SP100, SU100, SP200, SU200, SP300, SP400
Fujitsu / Amdahl	Communication Units	4745
SUN	Servers and Workstations	All Products
SUN	Storage	All products except Sun labeled HDS storage
HP	Servers and Workstations	(1) All HP9000/800 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 - 7XX,J,B, and C class workstations).
HP	Storage	All HP Storage Devices except XP series (48,256,512, and 1024) and DLT autoloaders and libraries
IBM	UNIX Servers	RS 6000: 7006, 7009, 7010, 7011, 7012, 7013, 7014, 7015, 7016, 7017, 7018, 7020, 7024, 7025, 7026, 7027, 7030, 7043, 7044, 7246, p8XX, i8xx, AS400
IBM	Intel Servers	xseries: x20x, x30x
IBM	Mainframe Servers	7060, 9021, 9078, 9121, 9221, 9672, zseries: 2064/2066
IBM	DASD	2104, 2105, 3380, 3390, 3680, 7131, 7133, 7134, 7135, 7137, 7203, 7204, 9331, 9332, 9333, 9334, 9337, 9345, 9390, 9391, 9392, 9394, 9395
IBM	Tape	2440, 3420, 3430, 3450, 3480, 3490, 3590, 3803, 7204, 7206, 7207, 7208, 7331, 9346, 9347, 9348
IBM	Libraries	3494, 3495
IBM	Other	A variety of Subsystem control units: Communications: Monitors, Multiplexers, Switches, Remote C.U., Graphics Systems, Directors, Converters, Sysplex Timers, Optical Storage
EMC	Storage	3xxx, 5xxx, 4bxx, 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

Warranty - Notebook

Warranty Details

THIS INTERNATIONAL LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHERS, WHICH VARY FROM STATE TO STATE.

1. At the time of purchase you may select a 1 or 3 year International Limited Warranty.
2. The internal modems on Fujitsu notebooks of Fujitsu Computer Systems are only qualified for use with telephone systems in selected countries, including the United States and Canada. For a list of certified countries, please check www.computers.us.fujitsu.com/modems
3. Some accessories sold separately are covered by their respective manufacturer's warranty and are not warranted by Fujitsu Computer Systems.
4. Effective August 15, 2002

International Limited Warranty Terms and Conditions

End-User Product International Limited Warranty

This end-user international limited warranty ("Warranty") is extended by Fujitsu Computer Systems to the original purchaser ("Purchaser") of the Fujitsu Computer Systems product ("Product") accompanied by this Warranty and is not transferable.

What is Covered

Fujitsu Computer Systems warrants the Product against defects in material or workmanship under normal use for the applicable warranty period listed below ("Warranty Period"), beginning from the date of original purchase by Purchaser. If the Product becomes defective during the Warranty Period, Fujitsu Computer Systems will, at its option and without charge, repair the Product with new or reconditioned components or parts, or replace the Product with a reconditioned product of the same or functionally equivalent model.

What This Warranty Does Not Cover

This Warranty does not cover and shall be void for defects or damages resulting from casualty, accident, transportation, misuse or abuse, neglect, alterations, service or repair by other than Fujitsu Computer Systems or its ASPs, improper installation, operation or maintenance, improper connections with peripherals, or other causes not arising out of defects in materials or workmanship. This Warranty does not cover Products used as short term rental equipment. Fujitsu Computer Systems and its Solution Providers are not responsible for damage to or loss of any programs, data, or removable storage media, whether it occurs during warranty or other repair service.

Preinstalled or Bundled Software

Fujitsu Computer Systems and its suppliers make no warranty or representation, either express, implied or statutory, with respect to software provided with the Product and licensed to Purchaser, its quality, performance, merchantability, or fitness for a particular purpose. Nor does Fujitsu Computer Systems warrant that the functions contained in the software will be uninterrupted or error free. The software is provided "AS IS", except if expressly warranted by the licensor in the applicable software license agreement, and is subject to the terms and conditions of the software license agreement contained in or accompanying the software. In no event will Fujitsu Computer Systems, its ASPs, dealers, distributors or other resellers be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect in the software or its documentation, even if advised of the possibility of such damages.

Data Storage Media

The only effective protection for data stored in a computer, such as on a hard drive, is the regular backing up of that data by you, the Purchaser. ASPs shall not be responsible for any software programs, data or other information stored or used on any media or part of any Product returned to Fujitsu Computer Systems or its ASPs for warranty service or other repair including the costs of recovering such programs or data. If during the warranty service or repair of the Product the contents of the hard drive or any other data storage media are altered, deleted, modified or lost, Fujitsu Computer Systems and its ASPs are not responsible. It is solely your responsibility as the Purchaser to back up any software programs, data, or information stored on any storage media or any part of a Product returned for warranty service or repair to Fujitsu Computer Systems or its ASPs.

Warranty Disclaimer and Limitations

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State Law Rights

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO SUCH LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Appendix D

Quality Care – Notebooks

Fujitsu Computer System's QualityCare Service Plan Overview Notebooks & Active Tablets

AVAILABLE NOW!! Fujitsu Computer Systems is proud to announce the most comprehensive Service Plan for our notebook products. This new program covers non-intentional, accidental damage during the warranty period. This program applies to all Notebooks and Active Tablet PC's.

What kind of damage is covered?

Some examples of non-intentional damage that are covered are:

<u>Cause of Failure</u>	<u>Resolution Description</u>
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

Damage caused by intentional acts, fire, theft or loss, is not covered under the QualityCare plan. Some examples of damage that would NOT be covered are:

<u>Cause of Failure</u>	<u>Resolution Description</u>
Damaged in a fire	Not covered -- insurance coverage
Intentional damage (hammer marks)	Not covered -- user responsibility
Stolen unit	Not covered -- insurance coverage
Normal wear (does not affect system performance)	Not covered

How is the repair/replacement handled?

If an incident occurs, the customer should call Fujitsu's 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 repair or replacement services. All QualityCare Repairs will be performed at the Fujitsu Repair Depot in Memphis, TN. This program is not authorized for repairs by Fujitsu Authorized Service Providers.

Limitations:

QualityCare allows a maximum of 1 repair activity per year.
Cosmetic damage not effecting functionality is excluded.

Who can purchase this Service Plan?

QualityCare is available, at time of product sale, for those customers who purchase directly from Fujitsu at a corporate level and for Special Bid. Resellers wishing to sell this program to specific customers must coordinate through their Fujitsu Sales Representative.

Appendix E

Installation Guide: 800 Series

CompuTrace Agent Installation Guide



Absolute[®]Software
www.absolute.com

May 15, 2008 3:17 pm

Computrace Agent Installation Guide

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Chapter 1: Introduction

Welcome

The Computrace Agent is a client software platform that allows you to access Absolute Software services such as ComputracePlus, ComputraceComplete, AbsoluteTrack and Computrace Data Protection.

The Computrace Agent software resides undetected on your computer. Once installed, the Computrace Agent contacts the Monitoring Center on a regular basis to report its location. This communication is quick, silent, and requires no interaction with the user. The Computrace Agent does not interfere with everyday remote communication functions such as Internet access or e-mail. The Computrace Agent has no impact on system performance.

Conventions Used in this Guide

Directory and file names appear in *italics*.

Example: Launch the installer by double-clicking the file *Computrace.msi* from the install media. From the installation media, extract the contents of *rpclient_image.tar* to the local machine and note where the files are located.

Screen objects appear in **bold**.

Example: Click the **Apply** button.

Field names appear in ***bold italics***.

Example: Enter your name in the ***Name*** field.

Computer input and output, such as sample listings, messages that appear on your screen, and commands or statements that you are instructed to type, appear in Courier typeface.

Example: Type `lanmake ctinstall.txt`.

Hardware and Software Requirements

PC Requirements

- Windows-compatible PC with a 486 or higher processor
- A functioning connection to the Internet
- Windows Me, Windows NT, Windows 2000, Windows XP (32-bit versions) and all 32 and 64 bit versions of Windows Vista clients
- Minimum Internet browser requirements: Microsoft Internet Explorer 6.0

NOTE

In order to use the *Computrace.msi* installer, your computer must have Windows Installer 3.0 or later. Windows Installer 3.0 is included in Windows 2000 Service Pack 3, and Windows XP Service Pack 2.

If you cannot use the *Computrace.msi* installer, or if you wish to install the Computrace Agent using settings other than the default settings the agent was shipped with, you will

need to contact Technical Support and request the document *Computrace Custom Installation Procedures*.

NOTE

If you cannot use the *Computrace.msi* installer, you can still install the Computrace Agent. You will need to contact Technical Support and request the document *Computrace Custom Installation Procedures*.

NOTE

Microsoft Internet Explorer 6.0 or higher must be installed and configured on all target computers. Internet Explorer settings are referenced by the Computrace executables. To test whether Internet Explorer is configured properly, run Internet Explorer and log on to any World Wide Web site.

Mac Requirements

- - G3 or higher processor
- - Hayes-compatible modem or connection to the Internet
- - Mac OS X v10.3 or above

NOTE

Mac OS 10.2 and earlier operating systems are not supported.

Contacting Technical Support

If you have difficulty using or installing the Computrace Agent, please contact Absolute Software Technical Support. We welcome your questions, comments, and feature requests.

Absolute Software offers technical support to users Monday through Friday between 6:00 a.m. and 6:00 p.m. (Pacific Standard Time).

Telephone Support: 1.888.999.9857

Fax Support: 1.604.730.2621 Attn: Technical Support

E-mail Support: techsupport@absolute.com

NOTE

If your organization hosts its own Enterprise System, contact your local administrator for assistance.

Chapter 2: Installation Overview

Installation Overview

This chapter is intended to introduce the three distinct Computrace Agent installation methods, and the conditions where each might be used. Depending on your network environment, the total number of machines to receive the software, and the hardware configuration of target machines, some installation methods may not be appropriate or possible.

The following overview will help you select the Computrace Agent installation method suitable for your organization.

- **Direct Installation** – Using the Direct Installation method, an administrator must manually install the Computrace Agent software on each machine individually. The Direct Installation method is most effective when installing the Computrace Agent on a small number of computers (one to ten). For further instruction, refer to [Chapter 3: "Direct Installation – Personal Computers"](#) or [Chapter 4: "Direct Installation – Macintosh"](#).
- **Local Area Network (LAN) Installation** – Using the LAN Installation method, installation files are stored on a network server and the software is installed across the network. LAN installation is the most effective method of installing the Computrace Agent onto large numbers of existing computers deployed throughout an organization. If you wish to use the LAN Installation method, contact Technical Support and request the document *Computrace Custom Installation Procedures*.

IMPORTANT

LAN Installation of the Computrace Agent for Mac is not directly supported. For assistance, contact Absolute Software's technical support team by telephone at 1.888.999.9857, or by sending an e-mail to techsupport@absolute.com.

- **Image Installation** – Using the Image Installation method, a single computer is configured and its hard-drive is then “imaged” or copied onto any number of target machines. Image Installation is most effective when installing the Computrace Agent onto large numbers of new or freshly formatted computers. The Image Installation method is advanced and should only be used by network administrators. If you wish to use the Image Installation method, it will be necessary to contact the administrator of your Enterprise System or Absolute Software to request additional installation files. Some required files are not included on the Installation CD. For further instruction, refer to Chapter 5: “Disk Imaging.”

IMPORTANT

Image installation of the Computrace Agent for Mac is not directly supported. For assistance, contact Absolute Software's technical support team by telephone at 1.888.999.9857, or by sending an e-mail to techsupport@absolute.com.

Chapter 3:

Direct Installation on Personal Computers

Direct Installation – Personal Computers

This chapter provides instructions for installing the Computrace Agent on personal computers. For instructions on installing the Computrace Agent on Macintosh computers, refer to [Chapter 4 - "Direct Installation – Macintosh"](#) on page 23.

The direct installation method requires hands-on contact with each target computer and is commonly used to install the Computrace Agent on individual computers not connected via a network.

Direct installations of the Computrace Agent can either use the default settings embedded in the *COMPUTRACE.MSI* file, or the installation can be customized. If you wish to customize the installation of the Computrace Agent, contact Technical Support and request the document called *Computrace Custom Installation Procedures*.

IMPORTANT

To install the Computrace Agent on a computer running Windows Vista you must either be logged on as an administrator or you must provide the administrative password for the computer. This is not required if you have disabled User Access Control in Vista.

NOTE

The Computrace Agent's settings can be manually altered after installation, however; desired changes must be made to each machine individually.

IMPORTANT

Throughout all installation processes, it is important to follow the instructions in ["Before You Begin"](#) on page 14 to ensure that the Computrace Agent remains tamper-resistant.

Before You Begin

1. Use a virus-scanning program to ensure that your hardware is free from viruses.
2. Using the CMOS setup program, set your boot drive to your primary hard drive and password protect your CMOS. Refer to your computer's documentation for more information.

NOTE

Step 2 is not required if your computer supports the Computrace BIOS Agent and it is enabled.

3. Verify that your computer's Internet connection is functioning correctly.

The Computrace Agent installation media will install the agent using default settings. Once installed, the Computrace Agent's settings can be modified. Refer to ["Managing The Computrace Agent"](#) on page 16 for instructions on altering agent settings post installation.

Installation

Launch the installer by double-clicking the file *Computrace.msi* from the install media. The Confirm Installation screen is displayed.

To install the Computrace Agent, click the **Next** button.

To cancel the installation process, click the **Cancel** button.

Once the installation is complete, the Computrace Agent will contact the Monitoring Center and receive its unique ESN.

Verifying the Installation

To verify that the Computrace Agent has successfully contacted the Monitoring Center and received a unique ESN, follow these steps:

1. Use Windows Explorer to browse to the location of the installation package.
2. Double-click the file *CTMWEB.EXE* to launch the Computrace Agent management utility. The Computrace Agent management utility operates via a web interface and will open in a new browser window automatically.

NOTE

If your computer is configured to use a default browser other than Internet Explorer, the Computrace Agent management utility may not open automatically. If this is the case, you can manually open the management utility by pointing your browser to <http://localhost:9871/ctmweb.xml>.

3. If your Computrace Agent was initially installed with an administrative password, enter it in the **Password** field. If you do not have an administrative password, enter a password of "password". Click the **Next** button.

NOTE

The **Password** field is obsolete, however; it is included for backwards compatibility with 700 series Computrace Agents.

4. Observe the following values:

- **Agent Mode** - will display active
- **ESN** – for activated agents, the last four characters of the ESN will be greater than 0000. If zeros are displayed, force a test call by clicking the **Test Call** tab, then clicking the **Start** button. Call status is displayed on-screen.
- **Last IP Call Date/Time** – any non-zero value indicates the Agent has made a call to the Monitoring Center.

If the **Last Call Date** field remains empty, your computer has failed to contact the Monitoring Center. Review the installation steps to ensure you haven't missed a step. If you are still unable to contact the Monitoring Center, contact Technical Support.

NOTE

By default, the Computrace Agent will be installed with modem support disabled. Modem function is automatically enabled on stolen machines during their first post-theft call to the Monitoring Center. For this reason, most machines will display "No last call" in the **Last Modem call Date/Time** field.

Managing The Computrace Agent

The *CTMWEB.EXE* application can be used to perform the following management tasks:

- Viewing details regarding the last call the Computrace Agent made to the Monitoring Center
- Viewing details regarding the next scheduled call
- Forcing the Computrace Agent to make a call to the Monitoring Center
- Changing the IP proxy settings of the Computrace Agent

IMPORTANT

To manage the Computrace Agent on a computer running Windows Vista you must either be logged on as an administrator or you must provide the administrative password for the computer. This is not required if you have disabled User Access Control in Vista.

To access the management features of the CTMWeb application, follow these steps:

1. Use Windows Explorer to browse to the location of the installation package.
2. Double-click the file **CTMWEB.EXE** to launch the Computrace Agent management utility. The Computrace Agent management utility operates via a web interface and will open in a new browser window automatically.
3. If your Computrace Agent was initially installed with an administrative password, enter it in the **Password** field. If you do not have an administrative password, enter a password of "password". Click the **Next** button.

NOTE

The **Password** field is obsolete, however; it is included for backwards compatibility with 700 series Computrace Agents.

Viewing Computrace Agent Call Details

The Agent Status screen lists details regarding the call schedule of the Computrace Agent. The Agent Status screen displays the following data:

CTMWeb Build # – displays the version number of the **CTMWeb.exe** application

Agent Build # – displays the version number of the Computrace Agent installed on the computer

Agent Mode – displays the mode of the installed Computrace Agent. Possible values are:

- Active – the Computrace Agent is installed and active
- Call Support – there is a problem with the Computrace Agent, contact technical support

ESN – displays the unique Electronic Serial Number assigned to the installed Computrace Agent

Last IP call Date/Time – displays the date and time of the Computrace Agent's last successful IP call to the Monitoring Center

Next IP call Date/Time – displays the date and time of the Computrace Agent's next scheduled IP call to the monitoring Center

Last Modem call Date/Time – displays the date and time of the Computrace Agent's last successful modem call to the Monitoring Center

Next Modem call Date/Time – displays the date and time of the Computrace Agent's next scheduled modem call to the monitoring Center

Forcing a Test Call

The Test Call screen of the CTMWeb interface is used to force the Computrace Agent to make a call to the Monitoring Center ahead of its scheduled call time.

NOTE

To successfully force a test call, the computer must be connected to the Internet.

To force a test call, follow these steps:

1. Launch the **CTMWEB.EXE** application.
2. If your Computrace Agent was initially installed with an administrative password, enter it in the **Password** field. If you do not have an administrative password, enter a password of "password". Click the **Next** button.

NOTE

The **Password** field is obsolete, however; it is included for backwards compatibility with 700 series Computrace Agents.

3. Click the **Test Call** tab at the top of the screen. The Test Call screen will open.
4. Click the **Start** button.

The Computrace Agent will then attempt to contact the Monitoring Center via the selected mechanism. During this time, the Test Call screen will display status information regarding the call in progress (in the **Call Status** field) and the screen may flicker.

You can verify the success of your test call by reviewing the values displayed in the **Last** and **Next** call fields on the Agent Status page.

Configuring IP Proxy Settings

The **CTMWEB.EXE** application can be used to alter the configuration of installed Computrace Agents. To change the configuration of the Computrace Agent, follow these steps:

1. Launch the **CTMWEB.EXE** application.
2. If your Computrace Agent was initially installed with an administrative password, enter it in the **Password** field. If you do not have an administrative password, enter a password of "password". Click the **Next** button.

NOTE

The **Password** field is obsolete, however; it is included for backwards compatibility with 700 series Computrace Agents.

3. Click the Options tab at the top of the screen. The Options screen will open.
4. Enter the user account the Computrace Agent should use when accessing the Internet through the proxy server into the **Name** field.
5. Enter the password for the defined user account in the **Password** field.

Save your IP configuration change by clicking the **Apply** button at the bottom of the page.

Upgrading The Computrace Agent Version

In addition to defining proxy settings, the Options screen includes a link to upgrade the Computrace Agent version. To upgrade your agent to the latest available version, open the Options screen and click the **Upgrade Version** button. The Computrace Agent will be upgraded without further user intervention.

Removing the Computrace Agent

It is not possible to remove the Computrace Agent using the tools in the installation package. If you wish to remove the Computrace Agent from host computers, contact Absolute Software's technical support team. See [Contacting Technical Support](#) below.

Contacting Technical Support

Absolute Software offers technical support to users Monday through Friday between 6:00 a.m. and 6:00 p.m. (Pacific Standard Time).

Telephone Support: 1.888.999.9857

Fax Support: 1.604.730.2621 Attn: Technical Support

E-mail Support: techsupport@absolute.com

Chapter 4:

Installation on Macintosh Computers

Direct Installation – Macintosh

This chapter provides instructions for installing the Computrace Agent on Macintosh computers. For instructions on installing the Computrace Agent on personal computers, refer to [Chapter 3 “Direct Installation – Personal Computers”](#) on page 13.

The Direct Installation method requires hands-on contact with each target computer and is commonly used to install the Computrace Agent on individual computers not connected via a network.

IMPORTANT

In order to install the Computrace Agent on a Mac OS X computer, you must have local administrative rights on the target device.

NOTE

Prior to installing the Computrace Agent, verify that your computer's Internet connection is functioning correctly.

Direct Computrace Agent Installation on Mac OS X

The Computrace Agent is delivered in a compressed ZIP file. To decompress the installation utility, double-click the file *CTClientxx-yy.zip* where *xx* is your account number and *yy* is the order number. The installation files will be extracted.

NOTE

The *CTClientxx-yy.zip* archive includes two different agent install packages: *ctm.tar* and *rpclient_image.tar* as well as release notes for the agent. For direct installation, use the *ctm.tar* package. The *rpclient_image.tar* file is a command line installer and is included for network administrators wishing to deploy the Computrace Agent for Mac from a command line. See “Command Line Installation of the Computrace Agent for Mac” on [page 33](#).

To run the installer, double-click the file *ctm.tar* to extract its contents, then double-click the file *CTMWEB*. The Welcome screen opens. See [Figure 1 on page 24](#).

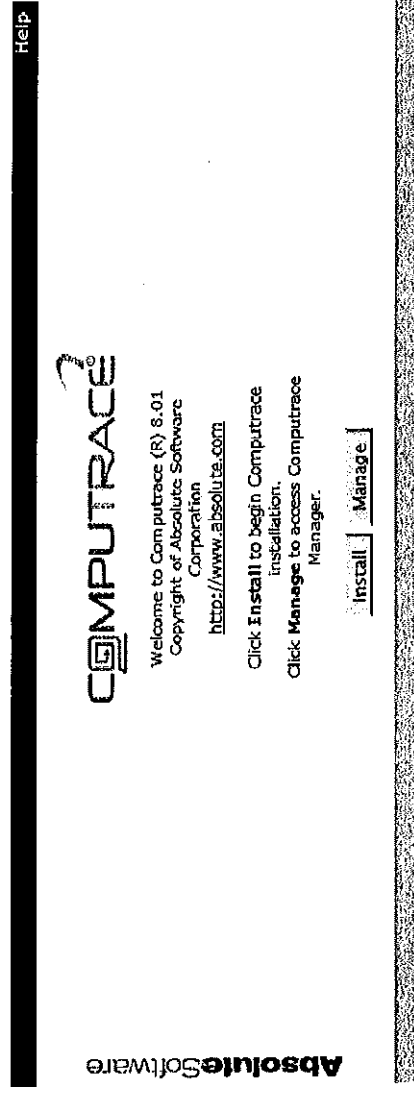


Figure 1: Authentication screen

NOTE

You must be logged on as a user with administrative rights to install the Computrace Agent for Mac.

Click the **Install** button to begin the installation.

The Installer will display the End User License Agreement screen. See Figure 2 on page 26. Read the Software License Agreement.

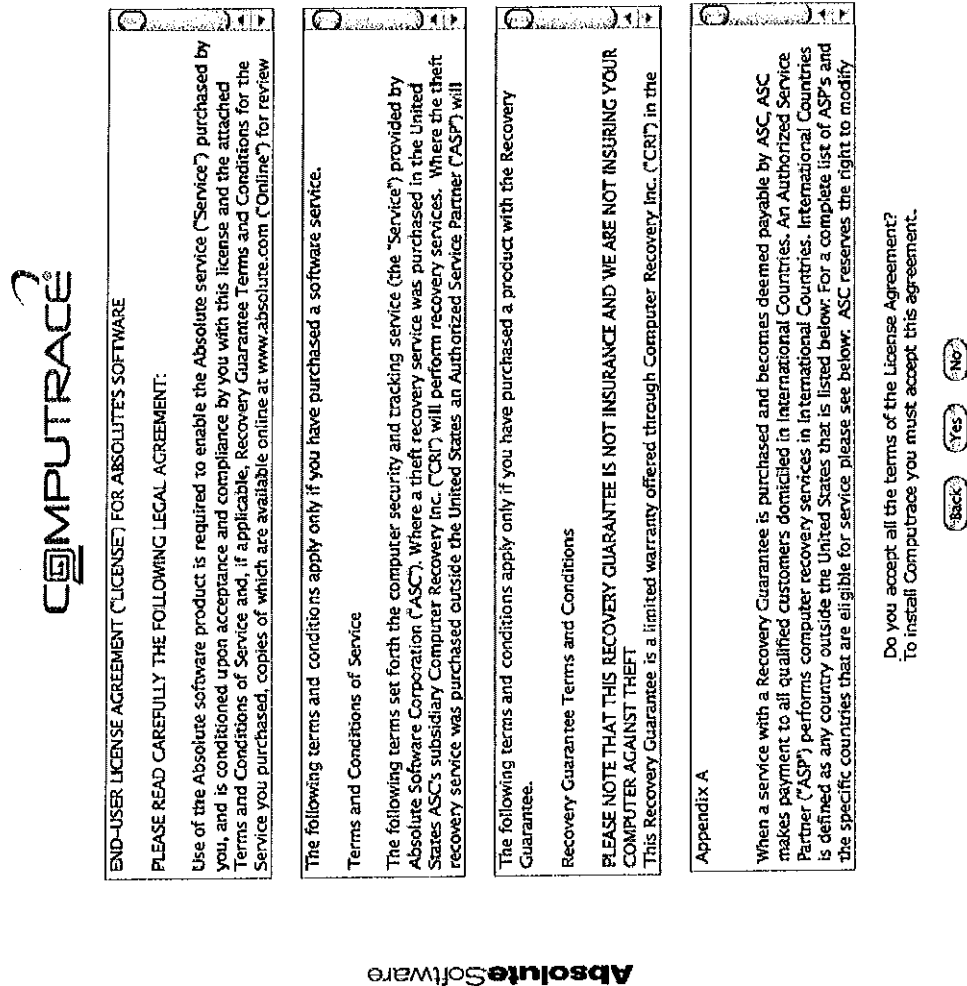


Figure 2: Software License Agreement screen

Once you have read the License agreement, click the **Yes** button to continue the installation. The Pre-installation Check List screen will open. See [Figure 3 on page 27](#).

NOTE

You must accept the End User License Agreement to continue the installation process.

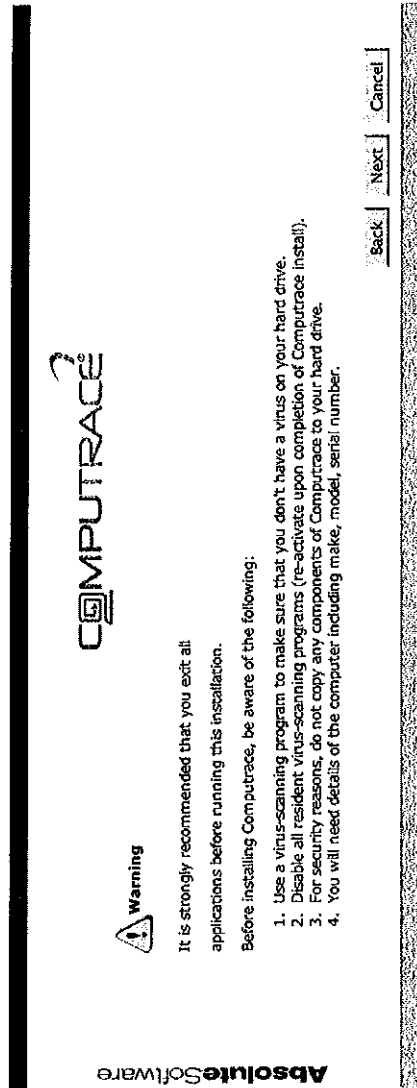


Figure 3: Pre-Installation Check List screen

Follow the pre-installation instructions and click the **Next** button. The Password screen will be displayed. See [Figure 4 on page 28](#).

Enter and confirm a management password in the spaces provided. Select a password you will remember. This password will be required to alter the agent's settings or to remove the agent once it has been installed.

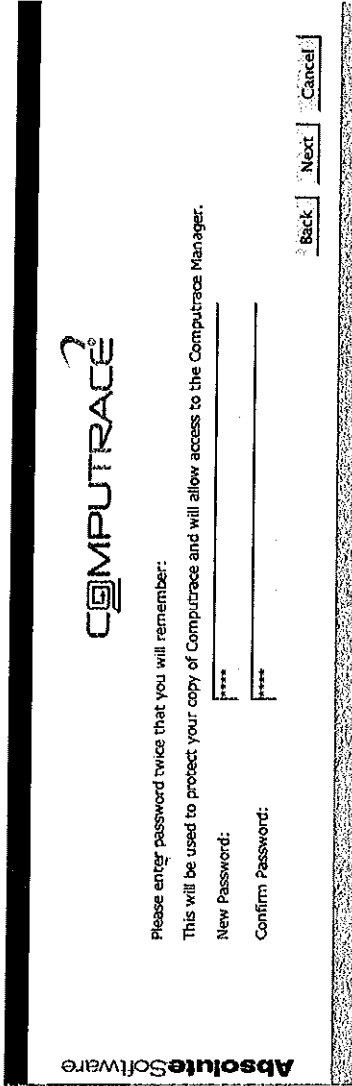


Figure 4: Password screen

Click the **Next** button to continue. The Computer Information screen will be displayed. See [Figure 5 on page 29](#).

The Computer Information screen lists identifying information associated with the host computer. Depending upon your computer model, some of the data points may be pre-populated with values automatically detected by the Computrace Agent. Verify any listed values are correct and enter any which are absent.

NOTE

The **Computer Asset Number** field is optional.

The Computer Information screen includes the following fields:

- **Mac Admin Password (required to install)** – Enter the administrator password for the local machine. This field is required to successfully install the Computrace Agent.

NOTE

This is different from the management password entered on the previous screen.

- **ESN** – Displays the unique electronic serial number associated with the computer. This field is not editable.

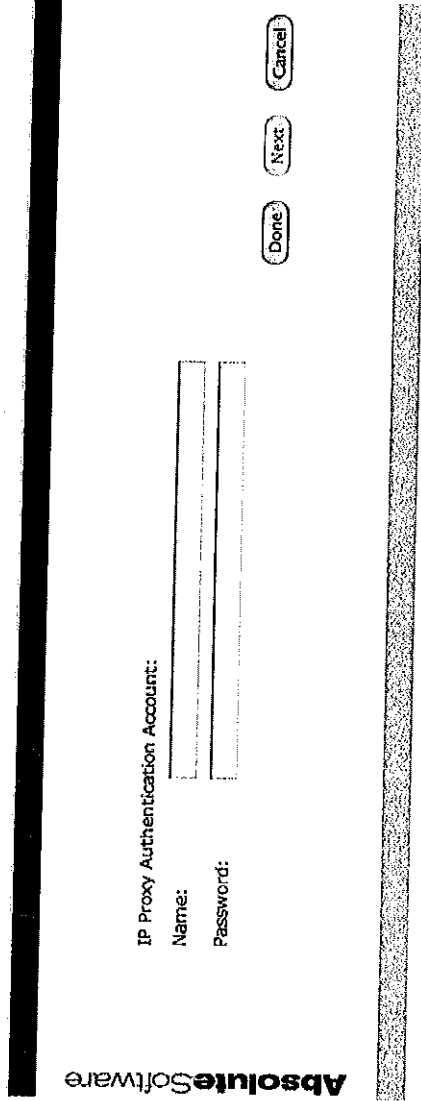
NOTE

Initially the **ESN** field will display the unique Parent ESN associated with your account. Once the Computrace Agent successfully completes its' first call to the monitoring center, the Parent ESN will be replaced with a new ESN unique to the computer.

- **Computer Make** – the computer's make
- **Computer Model** – the computer's model
- **Computer Serial Number** – the computer's serial number
- **Computer Asset Number** – the computer's asset number (optional)

Figure 5: Computer Information screen

The Computer Information screen includes a button labelled **IP Options**. If your computer is behind a proxy server, you will need to define IP Options for the Computrace Agent. To define IP Options, click the **IP Options** button. See [Figure 6 on page 30](#).



IP Proxy Authentication Account:

Name:

Password:

Done Next Cancel

Figure 6: IP Options screen

- Enter the user account the Computrace Agent should use when accessing the Internet through the proxy server into the **Name** field.

- Enter the password for the defined user account in the **Password** field.

Save your IP configuration change by clicking the **Done** button. You will be returned to the Computer Information screen.

To complete the installation of the Computrace agent, click the **Continue** button. The installer will now install the Computrace Agent with the defined values. Once the installation is complete, the CTMWeb installation interface will close and the management interface will open.

Verifying Agent Installation

Computrace Agent Installation Guide

Once the installation is complete, the CTMWeb installation interface will close and the management interface will open and display the Agent Status page. See "[Agent Status screen](#)" on page 32.

NOTE

The CTMWeb management interface is fully described in "[Managing the Computrace Agent](#)" on page 34.

At this time, the Computrace Agent will attempt to place an activation call to the Monitoring Center in order to receive its own unique ESN.

To verify that the agent has successfully installed and is able to make calls to the Monitoring Center, review the following fields on the Agent Status page:

- **Agent mode** – confirm this field displays 'Active'
- **ESN** – for activated agents, the last four characters of the ESN will be greater than 0000. If zeros are displayed, force a test call by clicking the **Test Call** tab, then clicking the **Start** button. Call status is displayed on-screen.
- **Last IP call Date/Time** – confirm this field does not display 'No last call'

IMPORTANT

The CTMWEB utility includes functionality to remove the Computrace Agent from the computer. Absolute Software recommends removing the Installation files from the host machine once the Computrace Agent for Mac has been successfully installed.

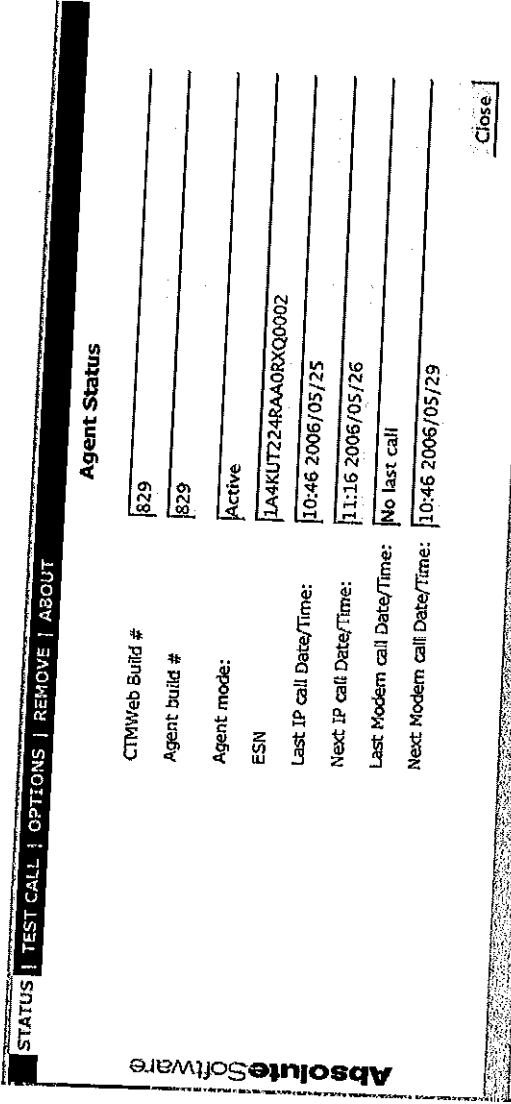


Figure 7: Agent Status screen

Command Line Installation of the Computrace Agent for Mac

In addition to direct installation, the Computrace Agent for Macintosh can be installed via the command line. To install the Computrace Agent for Mac from the command line follow these steps:

1. **Extract the contents of the `rpclient_image.tar` archive** – From the installation media, extract the contents of `rpclient_image.tar` to the local machine and note where the files are located.
2. **Navigate to the installation directory** – Open a terminal window and navigate to the directory where you extracted the files in Step 1.
3. **Run the installer** – Type the command `sudo ./install.sh`

When prompted, enter the administrative password. The installation will complete and the following confirmation message will be displayed:

```
Install path is: /
```

You may now create a drive image with the Computrace Agent. On the first startup from the imaged drive, the installation will complete.

4. **Complete the installation** – Reboot the machine to complete the installation.

Managing the Computrace Agent

CTMWeb can be used to manually alter the Computrace Agent's operating parameters at any time after installation. CTMWeb is not copied to the computer during installation. To launch the CTMWeb Utility manually, you will first have to extract the CTMWeb utility from the installation media. Browse the installation media and extract the *ctm.tar* package from the *CTClient.zip* file. Double-click the CTMWeb file to launch the Computrace Settings utility. Click the **Manage** button and enter your management password in the space provided.

IMPORTANT

The CTMWeb utility includes functionality to remove the Computrace Agent. For this reason, Absolute Software recommends you delete the installation files from the host computer once management tasks have been completed.

The Computrace Settings utility includes the following tabs, each of which is further described in subsequent sections:

- **Status** – displays the device's ESN and next call information. See [Figure 7 on page 32](#)
- **Test Call** – used to force the Computrace Agent to place a call to the Monitoring Center. See [Figure 8 on page 36](#).
- **Options** – used to alter the proxy server settings used by the Computrace Agent, to change the management password, or to upgrade the version of the Computrace Agent installed
- **Remove** – use this screen to remove the Computrace Agent from the host computer
- **About** – displays the Computrace Agent's version information

Agent Status Screen

The Agent Status screen displays the ESN and call information associated with the Computrace Agent. See [Figure 7 on page 32](#). The Agent Status screen includes the following fields:

- **CTMWeb Build #** – the version number of the CTMWeb utility
- **Agent Build #** – the version number of the Computrace Agent
- **Agent Mode** – the current mode of the Computrace Agent. Possible values are
 - **Active** – the Computrace Agent is installed and active
 - **Call Support** – there is a problem with the Computrace Agent, contact technical support
- **ESN** – the Computrace Agent's unique electronic serial number
- **Last IP call Date/Time** – the date and time-stamp of the Computrace Agent's last successful IP call to the Monitoring Center
- **Next IP call Date/Time** – the date and time-stamp of the Computrace Agent's next scheduled IP call to the Monitoring Center
- **Last Modem call Date/Time** – the date and time-stamp of the Computrace Agent's last successful modem call to the Monitoring Center
- **Next Modem call Date/Time** – the date and time-stamp of the Computrace Agent's next scheduled modem call to the Monitoring Center

Test Call Screen

Force A Test Call

To force the Computrace Agent to place a call to the Monitoring Center, from any screen within the Computrace Settings utility, click the **Test Call** tab to open the Test Call screen. See [Figure 8 on page 36](#). Click the **Start** button to initiate a test call to the Monitoring Center.

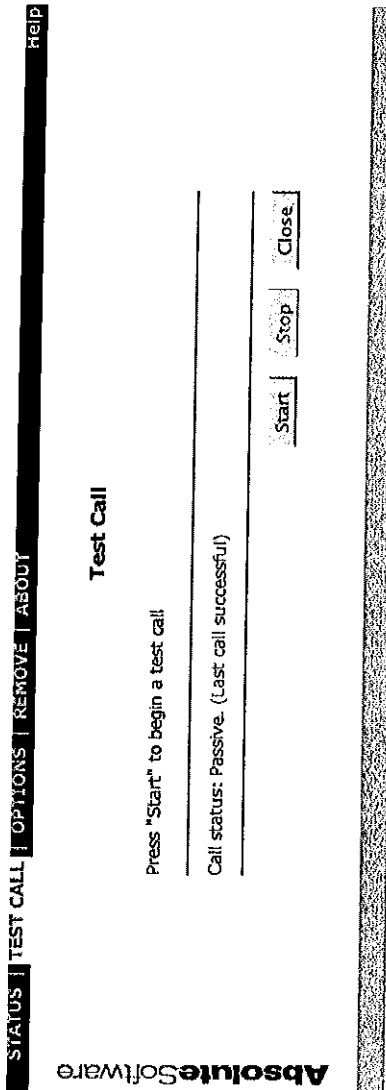


Figure 8: Test Call screen

The Agent will attempt to make a connection with the Monitoring Center. You can verify the success a test call by reviewing the details of the agent's next scheduled call and its last successful call, which are listed on the **Agent Status** screen.

Options Screen

The Options screen enables users to alter the proxy server settings used by the Computrace Agent, to change the management password, or to upgrade the version of the Computrace Agent installed.

STATUS | TEST CALL | OPTIONS | REMOVE | ABOUT

Options

IP Proxy Authentication Account:

Name:

Password:

Change Agent Management Password:

New Password:

Confirm Password:

Enter Mac Admin password (required to modify agent):

Upgrade version Apply Close

Figure 9: Options screen

Changing Proxy Settings

To change the settings the Computrace Agent uses when accessing the Internet through a proxy server:

1. Launch the *CTMWEB* utility and log in to the Management interface.
2. Click the **Options** Tab. The Options screen will open. See [Figure 9 on page 37](#).
3. Enter the User Name and Password the agent should use in the **Name** and **Password** fields.
4. Click the **Apply** button.

The Computrace Agent will now use the new settings on each call to the Monitoring Center. To confirm the Computrace Agent is functioning correctly with the new settings, follow the instructions to "Force A Test Call" on page 35.

Changing The Computrace Agent Management Password

To change the management password for the Computrace Agent follow these steps:

1. Launch the *CTMWEB* utility and log in to the Management interface.
2. Click the **Options** Tab. The Options screen will open. See Figure 9 on page 37.
3. Enter a new password in the **New Password** field.
4. Enter the password a second time in the **Confirm Password** field.
5. Click the **Apply** button.

Upgrading The Version Of The Installed Computrace Agent

Follow the steps below to upgrade the version of the installed computrace agent:

1. Launch the *CTMWEB* utility and log in to the Management interface.
2. Click the **Options** Tab. The Options screen will open. See Figure 9 on page 37.
3. Enter the Administrator password for the computer in the **Enter Mac Admin Password** field.

IMPORTANT

This is the administrator password for the computer, not the Computrace Agent Management password.

4. Click the **Upgrade Version** button.

The computer will now download the latest version of the Computrace Agent from the Monitoring Server and replace the installed agent. All settings from the current agent will be preserved and automatically transferred to the new agent once the installation is complete.

Removing the Computrace Agent

Follow the steps below to remove the Computrace agent from the host computer.

1. Launch the *CTMWEB* utility and log in to the Management interface.
2. Click the **Remove** tab. The Remove Computrace screen will open. See [Figure 10 on page 40](#).
3. Enter the Administrator password for the computer in the **Enter Mac Admin Password** field.

IMPORTANT

This is the administrator password for the computer, not the Computrace Agent Management password.

4. Click the **OK** button. A confirmation widow will open, asking you to confirm you wish to remove the Computrace Agent. Click **Yes**. The Computrace Agent will be removed from the computer and the management interface will display a message confirming the agent has been removed. Close your browser window.

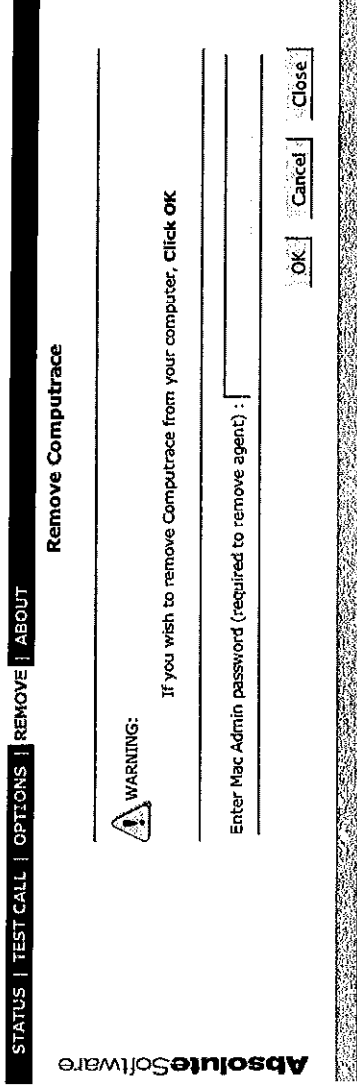


Figure 10: Remove Computrace screen

Contacting Technical Support

Absolute Software offers technical support to users Monday through Friday between 6:00 a.m. and 6:00 p.m. (Pacific Standard Time).

Telephone Support: 1.888.999.9857

Fax Support: 1.604.730.2621 Attn: Technical Support

E-mail Support: techsupport@absolute.com

Computrace Agent Installation Guide

Chapter 5:

Disk Imaging - PC and Macintosh

Disk Imaging

Disk imaging is used to copy standard applications onto unconfigured machines. First, a single computer (the source computer) is configured with all of the company's desired software. Then, an imaging program is used to create a complete image of the computer's hard drive. Finally, this disk image is copied to any number of identical systems (the target computers).

When installing the Computrace Agent using imaging, the source computer is disconnected from the network and prepared with all the desired software, including the Computrace Agent software. With the machine still disconnected from the network, the machine's hard drive is imaged. Images created in this manner will initially have a generic ESN which is associated with your account. When deployed, each target computer will contact the Monitoring Center on its first boot and receive a unique ESN.

IMPORTANT

CAUTION: Be sure that you do not make the installation image from a computer on which the Computrace Agent is installed and active. If such an image were created, and then copied to multiple target computers, it would result in multiple machines with the same ESN (Electronic Serial Number). There would subsequently be no way of differentiating between the machines, as each would contact the Monitoring Center with the same ESN.

Creating Disk Images For PCs

Before You Begin

1. Use a virus-scanning program to ensure that your hardware is free from viruses.
2. Using the CMOS setup program, set your boot drive to the primary drive and password protect your CMOS. Refer to your computer's documentation for more information.

NOTE

Step 2 is not required if your computer supports the Computrace BIOS Agent and it is enabled.

3. Verify that your computer's Internet connection is functioning correctly.

Creating the Standard Image

Follow the steps below to create a standard drive image for a PC.

1. **Prepare the Source Computer** – Starting with a freshly formatted computer, install an operating system and any desired software to be included in the image. Disconnect the computer from the network and install the Computrace Agent.

IMPORTANT

Ensure the source computer does not have internet connectivity when you install the Computrace Agent.

Once installed on the source computer, the Computrace Agent will attempt to contact the Monitoring Center to receive a unique ESN. It is imperative that the agent not be able to secure a unique ESN prior to the creation of the image.

2. **Create An Image** – With the computer still disconnected from the network, create a hard drive image of the source computer.
3. **Test The Image** – Deploy the drive image to a target computer, connect the target to the internet and verify the target's Computrace Agent has received a unique ESN. To verify the agent's ESN, see [Chapter 3 - "Verifying the Installation"](#) on page 14.

Creating Disk Images for Macintosh Computers

Follow the steps below to create a standard drive image for a Macintosh computer.

1. **Prepare the Source Computer** – Starting with a freshly formatted computer, install the operating system and any desired software to be included in the image.
2. **Extract the contents of the *rpclient_image.tar* archive** – From the installation media, extract the contents of *rpclient_image.tar* to the local machine and note where the files are located.
3. **Navigate to the installation directory** – Open a terminal window and navigate to the directory where you extracted the files in Step 2.
4. **Run the installer** – Enter the following command

```
sudo ./install.sh
```

When prompted, enter the administrative password. The installation will complete and the following confirmation message will be displayed:

Install path is: /

You may now create a drive image with the Computrace Agent. On the first startup from the imaged drive, the installation will complete.

5. Create an image of the hard drive.
6. Test the new hard drive image. Deploy the drive image to a target computer, connect the target to the internet and reboot the machine. Verify the target's Computrace Agent has received a unique ESN. To verify the agent's ESN, see Chapter 4 - "Verifying Agent Installation" on page 31.

Chapter 6: Active Directory Deployment

Active Directory Deployment

The *Computrace.msi* installation file conforms to industry standards for MSI files, enabling network administrators to deploy the Computrace Agent into their environment using Active Directory.

This chapter provides sample instructions for deploying the Computrace Agent using a login script in Active Directory. These instructions are generic and are intended to serve as a starting point for developing your own scripts.

NOTE

For the remainder of this chapter, a basic understanding of Active Directory structure and terminology is assumed.

Using the example below, the following instructions would deploy the Computrace Agent on all machines located in the OU=Computer, OU=Vancouver, OU=BC Active Directory domain. Additionally, the installation would occur once per computer as opposed to once per user. When performing an Active Directory deployment at your site, replace the values listed in the example below with your own settings.

1. Open **Active Directory Users and Computers**
2. If necessary, build the tree structure you require. For example:
 - OU=BC
 - OU=Vancouver,OU=BC
 - OU=Computers,OU=Vancouver,OU=BC
 - OU=Users,OU=Vancouver,OU=BC
3. Right-click the **OU=Computers,OU=Vancouver,OU=BC** container and select **Properties**.

4. Click the **Group Policy** tab and click **New**. Define a name for the new policy.
5. Right-click the new policy and select **Properties**, click the **Security** tab and grant **Full Control** to the **System** group. Click the **OK** button.
6. View the **Group Policy Object Links** for the policy.
7. Drill-down to **Computer Configuration** => **Windows Settings** => **Scripts** and view the properties of the **Startup** script.
8. Click the **Add** button and add the *Computrace.msi* program with the */qn* switch as in this example:

```
computrace.msi /qn
```

The */qn* switch forces a 'silent' install meaning computer users will not be made aware of the installation.

9. Copy the Computrace Agent setup files to the Active Directory scripts folder:

```
c:\windows\sysvol\domain\policies\%PolicyNumber%\Machine\Scripts\startup
```

NOTE

The specific path can be viewed by clicking the **Show Files** button in the Startup Properties.

10. Test the script.

IMPORTANT

Absolute Software recommends testing your script on a single PC before deploying across your environment.

Chapter 7: Troubleshooting

Troubleshooting

At Absolute Software, our goal is to provide you with a product that is simple to use yet offers sophisticated security for your computer equipment. Once the program is installed and its few configuration options set correctly, it protects your computer with no additional effort on your part.

In the unlikely event you experience a problem connecting to the Monitoring Center, refer to the following section for assistance.

Installation Error Message

If you see the message "Viral Shield Active" during the installation process, your computer is either infected with a virus or you are running a resident virus protection program.

If your computer is infected with a virus, you must remove it before you can proceed with the installation.

If you are running a virus protection program, disable it and then reinstall the Computrace Agent. After the installation is complete, you can re-enable your virus scanning software.

Resolving Connectivity Problems

After you install the Computrace Agent and restart your machine, the Computrace Agent initiates a call to the Monitoring Center. A test call can be placed at any time by running the Computrace Manager and selecting the **Test** option.

Connecting to the Server via TCP/IP

If your computer is able to access the Internet, you can place an IP test call to verify that the Computrace Agent can connect to the Monitoring Center using your TCP/IP

connection. If you access the Internet using a dial-up account with a provider rather than a direct, constant connection such as a LAN, DSL phone line, or cable modem, you must manually dial and log in to your service provider before you begin the IP test. The Computrace Agent cannot initiate a dial-up connection; it can only communicate with the Monitoring Center over an existing connection.

If the IP test call fails:

- Verify that you can access the Internet. If you cannot connect to other Internet sites, you will not be able to connect to the Monitoring Center.
- If you cannot access any Internet sites and are communicating over a DSL phone line, cable modem, or dial-up account, contact your Internet service provider for assistance.
- If you cannot access any Internet sites and are in a work environment (communicating over a LAN), ask your network administrator for assistance.
- If you are behind a firewall or communicating through a proxy server you must ensure that your proxy settings are correct and the appropriate port is specified. See "[Connecting through Firewalls and Proxy Servers](#)" below.

Connecting through Firewalls and Proxy Servers

If you are using an authenticating firewall, click **Options** tab within the CTMWeb interface and fill in the **Username** and **Password** fields with the username and password you would enter when prompted in your browser.

NOTE

An authenticating firewall requires a password for Internet access. If you are not prompted for a password, these fields should remain blank.

Corporate Firewall

Computrace uses HTTP tunneling over port 80 to reach Absolute's monitoring center. Typically, if you can browse the Internet from the computer on which Computrace is installed, it can call Absolute's monitoring center.

In a corporate environment, a firewall is used to isolate the corporate network from the Internet. A corporate firewall may be configured in several ways that can affect the Computrace Agent:

- **Configured to allow all HTTP traffic from internal users:** If the corporate firewall is configured to allow all HTTP traffic from internal users, the Computrace Agent should function correctly via IP. No additional configuration should be required.
- **Configured to allow authenticated users to access the Internet:** The corporate firewall may be configured to allow only authenticated users to access the Internet. This can be accomplished by in two ways:
 - **Windows Challenge/Response:** Allows any user logged into the Windows domain to access the Internet. In this case, as long as the Computrace Agent is running on a machine on which a user has correctly logged into the domain, it will function correctly.
 - **Basic Authentication:** Prompts the user for a username and password in order to access the Internet. In this case, the Computrace Agent must be configured with

a valid account (username and password with Internet access) in the Options tab of the CTMWeb interface.

- **Configured to allow based HTTP traffic to selected Internet Addresses:** In this configuration, the proxy server has been configured to disallow HTTP traffic from certain IP addresses. To allow the Computrace Agent to function correctly via IP in this configuration, the proxy server (firewall) should be configured to allow HTTP traffic to the Absolute Monitoring Center. Contact your technical account representative or Absolute Technical Support for the correct configuration information.

Proxy Servers

Computrace automatically detects proxy settings and uses them to call our monitoring center. On the Windows PC, Computrace uses the proxy settings specified in Internet Explorer. On the Mac, Computrace uses the proxy settings from the system preferences.

- **Configured to allow HTTP traffic to selected Internet addresses:** In this configuration, the proxy server has been configured to disallow HTTP traffic from certain IP addresses. To allow the Computrace Agent to function correctly via IP in this configuration, the proxy server (firewall) should be configured to allow HTTP traffic to `http://search.namequery.com`.

NOTE

If your organization hosts its own Enterprise System, contact your administrator to determine the correct URL of your Monitoring Center. Replace the reference to `search.namequery.com` in the above example with the URL provided.

Appendix A: Computrace Agent Installation Tools

Computrace Agent Installation Tools

Absolute Software has developed several tools to assist network administrators with the deployment of the Computrace Agent. These tools, their function, and when to use each, is detailed below. If you would like to use any of these tools you can request them from Absolute Software's Technical Support team by telephone at 1.888.999.9857, or by e-mail at support@absolute.com.

Setup.exe

SETUP.EXE is a 32-bit installation tool developed to assist users in mass deploying the Computrace Agent software within an organization. *SETUP.EXE* is used to automate the installation of the Computrace Agent software, by retrieving make, model, and serial number information from the computer's BIOS or from a properly formatted script file. *SETUP.EXE* is discussed extensively in the document [Computrace Agent Custom Installation](#), available by request from Absolute Software.

Ctsetup.ini

Ctsetup.ini is a plain text formatted file which controls all of *SETUP.EXE*'s functionality. *Ctsetup.ini*'s use, including all applicable options, their associated default values, and all acceptable alternate values, is described in the document [Computrace Agent Custom Installation](#), available by request from Absolute Software.

Sleep.exe

Sleep.exe is used to enable a pause or delay within the execution of script or batch files. Occasionally it is necessary to pause the execution of these files between steps to enable previous commands to complete.

