

TAB 11

Copy of Filed Letter of Intent

FORM 8
LETTER OF INTENT TO SUBMIT A PROPOSAL

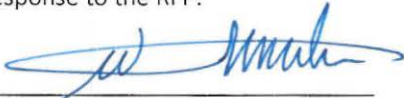
PROPOSERS ARE REQUIRED TO SUBMIT A LETTER OF INTENT NO LATER THAN 12:00 P.M., July 5, 2018. FAILURE TO DELIVER A LETTER OF INTENT BY THE DEADLINE SHALL RESULT IN AUTOMATIC DISQUALIFICATION FROM PARTICIPATION IN THE COMPETITIVE PROCESS.

Computer Network Systems D/B/A Computerlink (the "Proposer") has received a copy of RFP PRDE-OSIATD-FY2018-001 Mobile Device Technology and Services for New Generation Schools (the "RFP") issued by the Puerto Rico Department of Education on June 13, 2018. I, the undersigned, in my capacity as President and CEO of the Proposer, am duly authorized to submit this Letter of Intent on behalf of Proposer, and to designate the following person to act on behalf of the Proposer as its principal contact in connection with the RFP:

PRINCIPAL CONTACT:

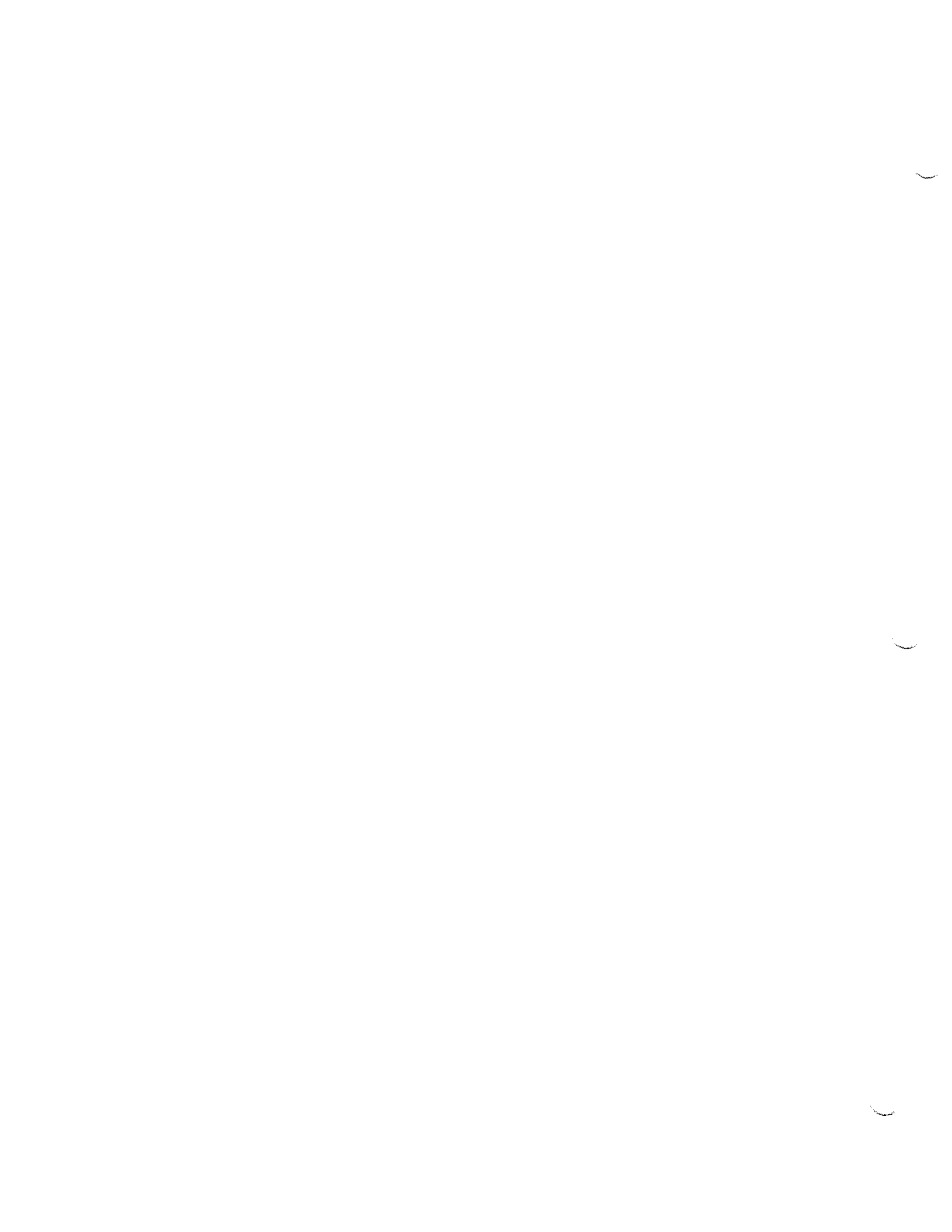
Name: David Morales
Title: Vice President
Address: 262 Uruguay Street
Suite C-2 Altagracia Bldg. San Juan, PR 00917
Office Phone: (787) 250-5465
Cell Phone: (787) 599-5466
Email: dave.morales@computerlink.cc

I hereby acknowledge receipt of the RFP and any addenda thereto, and certify that it is the intent of the Proposer to submit a proposal in response to the RFP.

Signature: 
Name/Title: Willie Morales / President and CEO
Date: 7/3/2018

LETTERS OF INTENT ARE TO BE ADDRESSED AND EMAILED TO

Sr. José L. Narváez Figueroa
osiatdproposal@de.pr.gov



Dave Morales

From: OSIATD Proposal <osiatdproposal@de.pr.gov>
Sent: Thursday, July 05, 2018 12:32 PM
To: Dave Morales
Subject: Re: Letter of Intent RFP NO: PRDE-OSIATD-FY2018-001

Good Afternoon,

This is to confirm receipt of the Letter of Intent from Computerlink by the 7/5/2018 deadline under RFP No: PRDE-OSIATD-FY2018 Mobile Device Technology and Services for New Generation Schools. Thank you.

PUERTO RICO DEPARTMENT OF EDUCATION

From: Dave Morales <dave.morales@computerlink.cc>
Sent: Tuesday, July 3, 2018 4:38 PM
To: OSIATD Proposal
Subject: Letter of Intent RFP NO: PRDE-OSIATD-FY2018-001

Dear Mr. Narváez Figueroa;

Enclosed please find our letter of intent for RFP NO: PRDE-OSIATD-FY2018-001.

If you need any additional information, please let me know.

Regards,

David Morales
Vice-President



262 Uruguay Street
Suite C-2; Altagracia Bldg.
San Juan, PR 00917

'NOTA DE CONFIDENCIALIDAD: El texto y los documentos que acompañan este correo electrónico están destinados sólo para el uso de la persona, personas o entidades mencionadas anteriormente. Si usted no es uno de los destinatarios se le notifica que cualquier divulgación, copia, distribución o si se lleva a cabo cualquier acción en relación con el contenido de este correo electrónico es estrictamente prohibido. Si usted ha recibido este correo electrónico por error, favor notificar inmediatamente y devolver el correo electrónico original a la persona que lo envió. CONFIDENTIALITY NOTE: The text and documents accompanying this electronic mail are intended only for the use of the individuals or entities named above. If you are not one of the intended recipients, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance of the contents of this electronic information is strictly prohibited. If you have received this electronic mail by error, please immediately notify and return the original electronic mail to the sender.'

TAB 12

Recent Legal Actions

1

2



July 11, 2018

José L. Narváez Figueroa
Director Ejecutivo III
Puerto Rico Department of Education
Corrections Building, 4th Floor
Tte. César González, Esquina Kalaf
Urb. Industrial Tres Monjitas
Hato Rey, PR 00926

Re: RFP NO: PRDE-OSIATD-FY2018-001

Dear Mr. Narváez Figueroa:

As per Tab 12: Disclosure of Recent Legal Actions, we're pleased to inform you that Computer Network Systems D/B/A Computerlink has never been a debtor in bankruptcy, a defendant in a lawsuit for deficient performance under a lease or agreement; a party in an administrative action for deficient performance or a defendant in a criminal action.

The undersigned, after reasonable inquiry and investigation, has no knowledge of any action, suit, proceeding, or material claim or investigation pending or threatened against Computer Network Systems D/B/A Computerlink in any court, or by or before any federal, state, municipal, or other governmental department, commission, board, bureau, agency, or instrumentality, domestic or foreign, or before any arbitrator of any kind, that, if adversely determined, would materially affect Computer Network Systems D/B/A Computerlink's ability, or the ability of its subcontractor(s), to perform the services described in its proposal at the prices set forth in its price proposal.

If you need additional information, please let me know.

Sincerely;

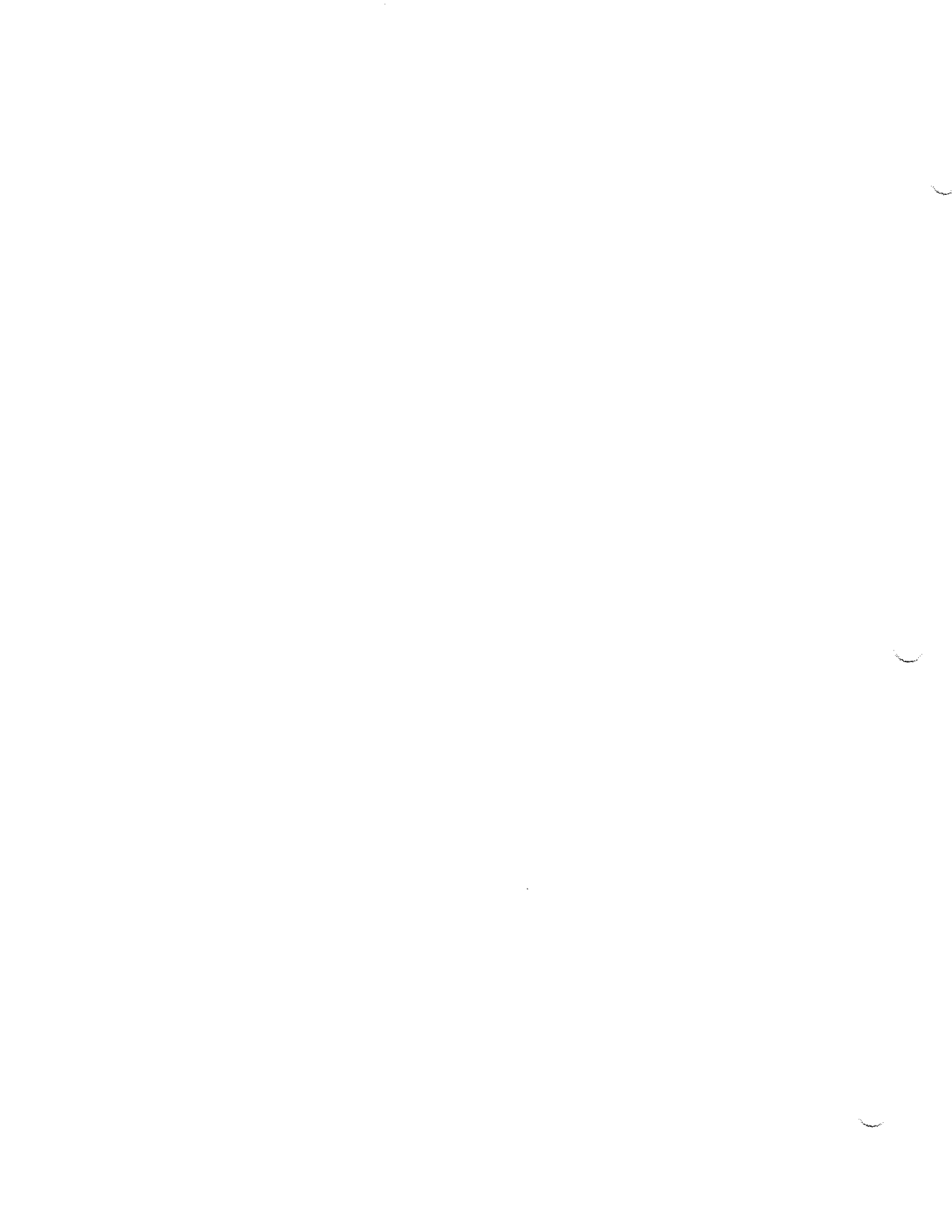
A handwritten signature in blue ink, appearing to read "David Morales", is written over a large, light blue circular scribble.

David Morales

Vice President

TAB 13

Service Level Agreement



IV. SERVICE LEVEL AGREEMENT; LIQUIDATED DAMAGES; RETAINAGE

1. SERVICE LEVEL AGREEMENT

A. DEVICE REPAIR AND REPLACEMENT SERVICE LEVEL AND RESPONSE REQUIREMENTS

1. SERVICE LEVELS:

- a. All devices to be delivered to the Department of Education for the first time will be a brand-new mobile device coming directly from the HP manufacturing plant and from the Cart manufacturing plant.
- b. Device replacement and configuration. The repair, replacement, configuration, installation, and test for new devices will be 100% in compliance with the Department of Education's requirements.
- c. OS DOE image. Computerlink's subcontractor UDT is readily available from an imaging consultation standpoint to ensure the best possible imaging and configuration processes are utilized. As a standard practice, UDT's Configuration Technical Engineer will meet with the designated team members to discuss image requirements and streamline the images accordingly to verify within the end user environment. The process for image creation and verification is listed below:

Image Verification Process

- 5) Pre-Image Development Meeting
 - a. UDT's technical team will meet with end user technical representatives to discuss and finalize image, configuration and BIOS requirements and discuss configuration options if required
- 6) Post Meeting Image Creation (if applicable)
 - a. Upon Completion of image requirement gathering, UDT's Configuration technical team will assist in the development of images to meet end user IT requirements
- 7) Image Deployment
 - a. UDT will push the image to test units and deliver to end user IT for environment verification to ensure the image is configured properly and all software is working as planned.
- 8) Image Upload (Pending image approval)
 - a. If no image adjustments are needed, image is rolled into production environment for image push

- b. If image adjustments are needed, end user team & UDT will perform image adjustments and re-verification will occur to confirm successful image push

UDT will provide access to all successfully verified images via secure FTP location. This will allow end user IT access to the images as needed (if applicable). In addition, and if requested, UDT will update all images on a pre-determined basis set by end user IT (if applicable). As a standard practice, UDT updates critical Windows updates on a quarterly basis but this can be adjusted on an as needed requirement by end user. Lastly, any new hardware products that are introduced into end user portfolio will also follow the above image creation and verification process. This will ensure a consistent set of images are deployed across all products and will reduce any configuration issues at site locations.

UDT follows a standard guideline for documenting all image creation and updates as requested by end user IT. This documentation will be provided as needed to designated representatives to ensure the proper flow of communication is adhered to when it comes to image configuration. Any image update that is performed will have an image approval document sent with it that will highlight any changes to the image. All units imaged can have an image version number associated with it within the UDT Asset Management System (DART). In the unlikely event that there appears to be an issue at site locations caused by the image, this will allow UDT and end user IT to easily discover which units have this particular image and where they are located.

Etching

UDT Response:

UDT will utilize its expertise around the etching process to work with the Department of Education to continue to update their requested laser etching logo and verbiage. DEPR provides any combination of logos, verbiage, warranty information and/or asset information to be etched on the units. This can be fully customized to meet the demands of DEPR. UDT will provide DEPR sample images with the requested etching configuration for verification prior to introduction to the production environment

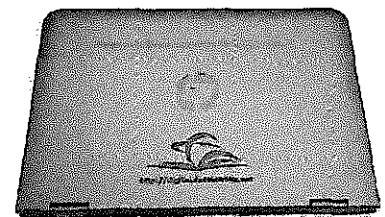


Figure 2 - Sample Etch

- d. Subcontractors. Computerlink has provided in this Proposal, all the information pertaining to the subcontractors participating with Computerlink in this Proposal. Computerlink will be responsible for all the subcontractors listed below included in the proposal. We understand that the Department of Education has the right to contact any subcontractor directly upon previous notification to Computerlink.

The Subcontractors to be working directly with Computerlink in performing this project are the following:

- 1) HP, Inc.
 - 2) United Data Technologies (UDT)
 - 3) Forward Learning
- e. Repairs. All devices include an accidental warranty service for repairs not covered by the standard on-site warranty
- f. Delivering Services. Computerlink will assign 15+ dedicated logistic teams and delivery vehicles to carry out delivery and installations (as defined in the RFP) throughout the entire island, including Vieques and Culebra. A day to day delivery calendar will be created and shared with the Department of Education. All sites will be contacted through the assigned DE coordinators on the day prior to delivery. The delivery vehicles from one or two highly secured warehouses located on different parts of the island. Regular deployment phase meetings will held weekly or bi-weekly with the Department of Education personnel, to be agreed beforehand.
- g. Device Training. Training will be conducted by Computerlink's subcontractor Forward Learning. For curriculum content samples for device training, please refer to Tab 20, Appendix " E" of proposal. Following is the detail of the Curriculum proposed:

Professional Development and Curriculum Integration

A significant investment in technology at the Department of Puerto Rico will enhance student learning, improve the efficiency and productivity of staff members and facilitate communication among students, staff, and parents. This Plan addresses the following areas:

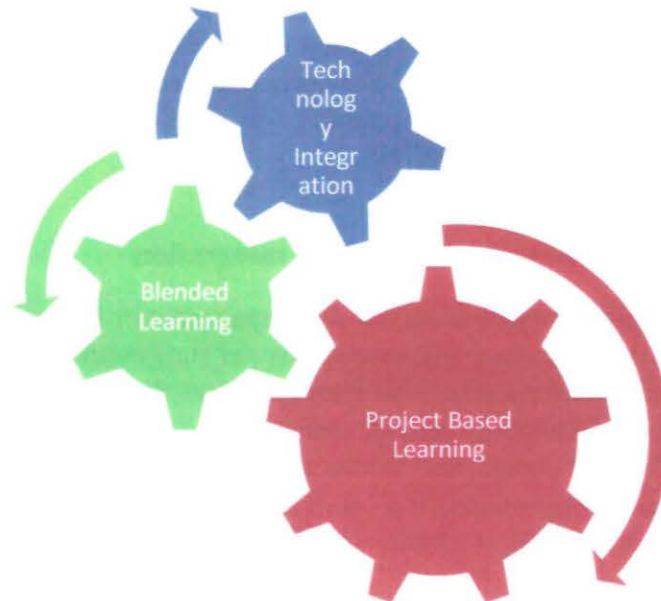
- Integration of technology into all classrooms to meet the needs of all students, providing individuality and choice, and enhance learning opportunities.
- Professional development for all staff members to ensure that technology is used to transform learning opportunities for all students.

Core Strategies

- **Educational Program:** We will implement and assess a comprehensive educational program based on 21st Century learning skills (collaboration, teamwork, creativity, critical thinking and problem solving) to educate the whole child.
- **Technology:** Every student will actively use technology to develop 21st Century skills within a safe and secure digital environment.

- **Professional Development:** The professional development program, which includes time for planning, collaboration, and administrative services, will support teachers and district employees to provide a nurturing, inspiring, and rigorous educational program.
- **Communication:** We will facilitate communication with the Puerto Rico Departments of Education (PRDOE) at every level consistent with our core values to promote our mission and to achieve the vision of department.
- **External Relations:** We will establish partnerships with corporate entities such Microsoft Puerto Rico and community members to use existing resources for training and professional development.
- **Facility Optimization:** We will develop a plan to maximize the use of existing facilities at the districts to provide professional development with our resources and instructional technology coaches at the PRDOE. Alternate facilities will be identified to assure coverage of the whole island.

Teaching Strategies



Blended Learning:

Definition

Blended Learning (BL) refers to a strategic and systematic approach to combine times and modes of learning, integrating the best aspects of face-to-face and online interactions for each discipline, using appropriate ICTs (Information & Communications Technologies). In a blended learning environment, learning occurs online and in person, augmenting and supporting teacher practice. BL often allows students to have better control over time, place, path, or pace of learning. In many blended learning models, students spend some of their face-to-face time with their teacher in a large group, some face-to-face time with a teacher or tutor in small groups, and sometimes learning with/from peers. BL often benefits from a reconfiguration of the physical learning space to facilitate learning activities, providing a variety of technology-enabled learning zones, optimized for collaboration, informal learning, and individual-focused study.¹

Why Blended Learning?

BL strategies vary according to the discipline, grade level, student characteristics and learning outcomes; and have a student-centered approach in terms of learning design. In this project, will be using varied approaches and strategies to implement Blended Learning, in which not all students will need a device all the time in the classroom. This model helps technology integration in multiple scenarios at the PRDOE.

In the book *Fundamentals of Blended Learning*, the University of Western Sidney² assures that BL can increase access and flexibility for learners, increase the level of active participation, and achieve better student experiences and outcomes. For the teaching staff, BL can improve teaching and class management practices. A blend might include:

- diverse face-to-face and online learning activities and formats,
- traditional time-tabled classes, but with different modes, such as weekend, intensive, external, and trimesters,
- the use of well-established technologies such as lecture capture tools, and/or the use of social media and emerging technologies,
- simulations, group activities, and site-based learning practices.

Blended Learning Framework

Implementing Overview Phase 1



During Phase 1: BL lesson plan, the students will rotate through four different learning studios. A mini-lesson with the teacher, independent practice, digital content, and a future ready skills activity. The students will move every ten minutes from one learning studio to the next. During the future ready

skills studio, the students can build, collaborate, work through challenges, and connect with other learners while using the skills that they learned throughout the other learning studios.

In the **Planning** area, activities will be implemented with a timer. Students rotate through the stations every 10 to 15 minutes. In the area of **Assessment and Data**, data will be collected from the digital content station. In the **Pace** area students will work the same activities, while moving to the designated areas to complete them.

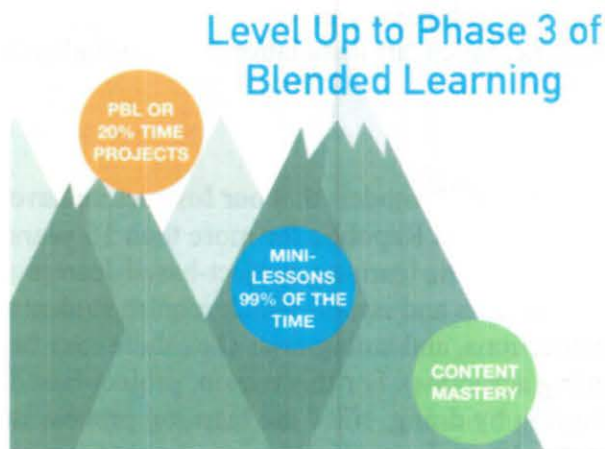
Implementing Overview Phase 2

In phase 2 in the **Planning** area, students will work without a timer. A checklist of tasks per station will begin to be used for the students. In the **Assessment and Data** area, data will be used to form groups and teach mini lessons. In the **Path** area, we will work through a variety of differentiated activities and in the area of **Place** we will work based on flexible learning options and places.



Level Up to Phase 2 of
Blended Learning

Implementing Overview Phase 3



In phase 3 in the **Planning** area, students will work with differentiated activities in all areas using an individual checklist. In the **Assessment and Data** area, students will take a pre-test to advance, extend or reteach content. In the **Path** area, teachers will create individual checklists generated with input from learners, and in the **Place** area work will be based on flexible learning options and places.

Blended Learning Professional Development

Implementation Plan

Participants in the “Blended Learning Academy” will be asked to participate in ongoing discussions about how to implement the blended learning model into the school LEA regions, schools, and classrooms. The “Blended Learning Academy” will meet at the start of the project's second year to reflect on the progress of the blended learning implementation as well as focusing on becoming well-rounded blended learning mentors. As general objectives, the participants in the “Blended learning Academy” will be able to:

- understand the definition of blended learning
- define the three phases of blended learning
- create sample lesson plans for the three phases of blended learning
- collaborate with other educators in the development of the blended learning rubrics
- develop a blended learning classroom rubric to be used by blended learning coaches
- using growth mindset examples to help move educators forward through the blended learning process
- Transitioning from traditional teaching to blended learning environments

Project Based Learning:

Project-based learning takes place in the context of authentic problems, continues over time, and brings in knowledge from many subjects. Project-based learning, if properly implemented and supported, helps students develop 21st century skills including creativity, collaboration, and leadership and engages them in complex, real-world challenges that help them meet expectations for critical thinking.³

Definition

Project-based Learning refers to any programmatic or instructional approach that utilizes multifaceted projects as a central organizing strategy for educating students. When engaged in project-based learning, students will typically be assigned a project or series of projects that require

them to use diverse skills—such as researching, writing, interviewing, collaborating, and/or public speaking—to produce various work products, such as research papers, scientific studies, public-policy proposals, multimedia presentations, video documentaries, art installations, or musical and theatrical performances, as possible examples.

Why Project Based Learning?

This proposal will be using the Buck Institute for Education PBL models that our Instructors have used and implemented in Puerto Rico, Spain and the Dominican Republic for more than 10 years in private and public-school environments. As a form of authentic learning, project-based-learning experiences are often designed to address real-world problems and issues, which require students to investigate and analyze their complexities, interconnections, and ambiguities (i.e., there may be no “right” or “wrong” answers in project-based-learning activities). For this reason, project-based learning may be called inquiry-based learning or learning by doing, since the learning process is integral to the knowledge and skills students acquire. Students also typically learn about topics or produce work that integrates multiple academic subjects and skill areas. For example, students may be assigned to complete a project on a local natural ecosystem and produce work that investigates its history, species diversity, and social, economic, and environmental implications for the community. In this case, even if the project is assigned in a science course, students may be required to read and write extensively (English); research local history using texts, news stories, archival photos, and public records (history and social studies); conduct and record first-hand scientific observations, including the analysis and tabulation of data (science and math); and develop a public-policy proposal for the conservation of the ecosystem (civics and government) that will be presented to the city council utilizing multimedia technologies and software applications (technology).

The following are a few examples of the kinds of arguments typically made by advocates of project-based learning:

- Project-based learning gives students a more “integrated” understanding of the concepts and knowledge they learn, while also equipping them with practical skills they can apply throughout their lives.
- The interdisciplinary nature of project-based learning helps students make connections across different subjects, rather than perceiving, for example, math and science as discrete subjects with little in common.
- Because project-based learning mirrors the real-world situations students will encounter after they leave school, it can provide stronger and more relevant preparation for college and work. Student not only acquire important knowledge and skills, they also learn how to research complex issues, solve problems, develop plans, manage time, organize their work, collaborate with others, and persevere and overcome challenges.
- Project-based learning reflects the ways in which today’s students learn. It can improve student engagement in school, increase their interest in what is being taught, strengthen their motivation to learn, and make learning experiences more relevant and meaningful.

- Since project-based learning represents a more flexible approach to instruction, it allows teachers to tailor assignments and projects for students with a diverse variety of interests, career aspirations, learning styles, abilities, and personal backgrounds.
- Project-based learning allows teachers and students to address multiple learning standards simultaneously. Rather than only meeting math standards in math classes and science standards in science classes, students can work progressively toward demonstrating proficiency in a variety of standards while working on a single project or series of projects.

Overview of PBL workshops

Through these workshops, participants will learn and implement the PBL strategy through a complete educational experience using research, technology and solving real life problems, while developing first students learning goals. Student learning of academic content and skill development are at the center of any well-designed project.

Key Knowledge and Understanding – the project is focused on students learning goals, including standard-based content and skills such as critical thinking/problem solving, communication, self-management and collaboration.

Key Success Skills - Content knowledge and conceptual understanding, by themselves, are not enough in today's world. In school, college and in the modern workplace, as citizens and in their lives generally, people need to be able to think critically and solve problems, work well with others, and manage themselves effectively. Often these competencies are called "soft skills" or "success skills." They are also known as "21st Century Skills" or "College and Career Readiness Skills."

Plan Duration

The duration of the Professional Development Plan (PDP) will be three years (September 1, 2018 through June 30, 2021). The plan will be reviewed and updated annually through the district's and LEA's strategic planning processes. The focus of this technology plan is the curriculum and professional development components while maintaining hardware, and infrastructure standards. The purpose of this 3-year Plan is to identify and address strategies that will help the PRDOE meet the National Education Technology Standards (NETS), as published by the ISTE (International Society for Technology in Education), and to promote student achievement and the development of 21st Century skills.

Plan Logistic

According to the Organization for Economic Cooperation and Development (OECD), schools that make use of educational technology on a routine basis report the higher levels of students with technology - related skills.⁴ However, commonly used supplementary teaching technologies, such as LCD projectors, interactive whiteboards, or guided web - tours, generally reinforce traditional "teacher - centric, lecture -based" pedagogy. While these tools may be occasionally useful for specific lessons, students can sometimes become distracted by the tools rather than engaged in the content.⁵ Elevating the use of technology in the classroom from an instructional supplement to a core teaching component requires teachers to shift their pedagogical practices. Such a transition

requires support from the district level to facilitate access to the technology and training necessary to engender large- scale changes. ⁶ If access and the use of technology is not continuous from year -to - year, it is difficult to effect meaningful change in teaching pedagogies.

For these reasons, we propose a three-year development plan for teachers and administrators to provide constant support to facilitate access to technology for all students. All the professional development will be based in two-evidence based strategies, Blended Learning and Project Based Learning, to model to teachers the work and concepts they should implement in the learning environment. The professional development activities are not meant to provide comprehensive training in BL and PBL, but rather model and practice how technology could become a core teaching and learning component to facilitate the transformation of pedagogical practices. With this transformation, the significant investment to be made by the PRDOE in new technology will have a sound and worthwhile return.

The service will be offered in the 7 educational regions, assigning four centers in each of the regions. The training centers will be concentrated in 4 physical locations in each region to provide close accessibility to nearby schools. The centers will operate Monday through Saturday to provide ample flexibility for all schools' faculties during a three-year timeframe. A Project Coordinator will be assigned in each region to ensure compliance with the PDP. The coordinator along with the team members will create a calendar to maximize the use of trainers, serving in an organized and equitable way all teachers throughout the seven regions, according to their classification and technology needs.

Yet, technology alone cannot develop the 21st century skills students require. Our resources are inspired, every day, by the impact amazing educators and thoughtful leaders are making on innovative teaching, all leading to improved student outcomes. Teacher effectiveness is the largest factor influencing student outcomes, outside of family background. Teacher professional development is key in successful digital transformation and in ensuring effective use of technology. For that reason, our trainers team are experts in a diverse set of technology tools and academic content areas, including all Microsoft Education apps, softwares and programs. See *Appendix A for a summary of our credentials*. Our role as Microsoft Global Training Partner is crucial in helping schools, districts and ministries to realize the value of their investment in technology, helping educators to effectively adopt the solutions without stress and through the adoption, utilization and effective integration of technology in teaching and learning to drive positive student learning outcomes. All our trainers will be proficient in Spanish. As part of the administrative structure of the PDP, a service calendar will be created and disseminated monthly to serve the population of teachers in the area. All teaching materials will be available in both Spanish and English.

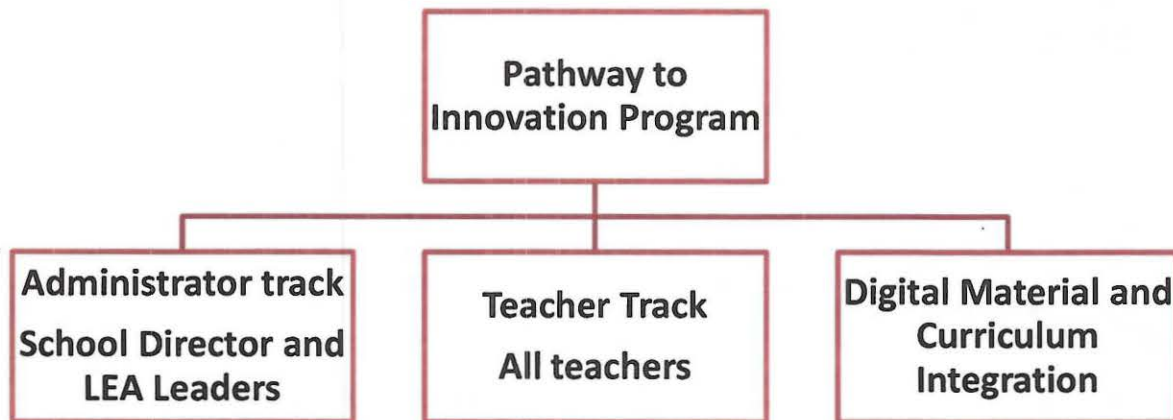
Main activities coordinated at the technology instructional center:

- Meeting with administrative staff of the DE to delineate logistics and calendar.
- Creation of course material
- Printing materials

- Selection of the 28 training centers distributed among the 7 regions of the PRDOE
- Visit and preparation of the training centers in coordination with LEA Directors. To guarantee the operation of training centers, the company will provide the electrical distribution materials (extensions, multiplugs, gaffer tape, etc.).
- Concurrency capacity tests of simultaneous users and the Internet will be carried out.
- Determination of the basic technology and technology integration skill levels of the staff.
- Offering of training blocks of 35 participants per day per center.
- During each training, the following documents will be collected: attendance sheets, pre and post tests and evaluations.
- The groups will be divided into 28 centers with a capacity of 35 computers (teachers will bring the computers provided by PRDOE for this project).

- The centers will have audiovisual equipment (projection surface, microphone and speakers, and a projector).
- Each center will have 2 specialized trainers.
- The effectiveness of the workshops will be guaranteed by hiring high-speed internet in the training centers where necessary.
- At the end of the training trimesters an achievement report will be delivered to PRDOE
- Mitigation program and calendars for make-up classes and for new teachers.

Professional Development



One of the most important aspects in this Professional Development Plan proposal is to be able to clearly demonstrate the progress achieved by teachers in their mastery of technology knowledge and use, and level of integration to the academic areas. For these purposes, various assessment instruments will be used during the project stages.

As part of the service, a survey (*see example questions in Appendix B*) and tests will be administered to all teachers and selected administrators, including school directors and LEA Leaders, to know their level of knowledge in the areas of technology use and integration. This online survey and test will provide essential information about current teacher use and their perception about technology. The Survey will be focus in perceptions about technology use, technology integration and technology skills. The results will be used to collect baseline data for this initiative. To maintain an up-to-date and reliable database, data collection platforms will be used and specialized staff will be assigned for the analysis and creation of reports on the data obtained during the project. This specialized staff will collaborate with the LEAs and OSIATD so that they can benefit from the data obtained and use it for their decision-making process. In the future, this survey will help districts to make better informed decisions for special initiatives, technology purchases, additional professional development needs, and to facilitate the coordination of coaching efforts in the use of instructional technologies. The survey will be used annually, at the beginning and end of each year of the technology project to measure the changes in how teachers relate to technology within their teaching/learning environments. The administrators may use pre and post comparisons for evaluation reports. This survey will categorize the teacher and administrator in 4 levels.

Beginners

- Level for personnel with results of 60% to 0%. For this personnel, 36 hours of professional development will be assigned.

Competent

- Level for personnel with results of 79% to 61%. For this personnel, 30 hours of professional development will be assigned.

Proficient

- Level for personnel with results of 89% to 80%. For this personnel, 24 hours of professional development will be assigned.

Master

- Level for personnel with results of 100% to 90%. For this personnel, 18 hours of professional development will be assigned.

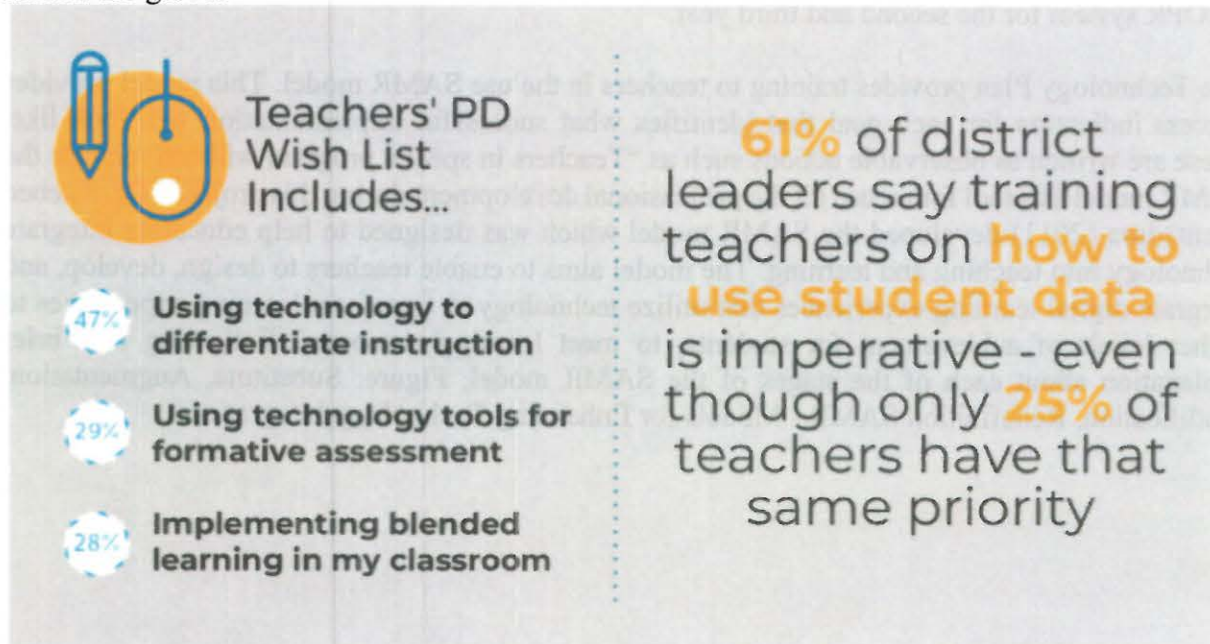
Recognition and reward systems will be implemented to provide incentives for the participation of teachers and leaders in the professional development activities. The training outcomes and the survey data will be used to measure performance and facilitate the recognition and awards program.

After the first survey, the following professional development plan for teachers and administrators will be implemented (*see programmatic plan in Appendix C*).

1. Administration Program – 35 Administrators and Assistants from the LEAs and 870 school Directors – Pathway to Innovation - Administrator Track

During the first year, administrators will discover the features of Office 365 that can help unlock user potential and maximize productivity in their educational regions. Through our two-day workshop, we aim to help them exploit some of the most useful Office 365 tools such as: Microsoft Teams; Skype for Business; OneDrive for Business and Outlook. The second and the third year

will be focus on Blended Learning and online learning, using the Microsoft Educator Community (MEC). The Microsoft Educator Community is a free professional learning platform designed to support and train educators using Microsoft products for teaching and learning. Building skills on the use of Windows 10, taking interactive quizzes and earning badges to become Certified Microsoft Innovative Educators. Once registered, they will find courses, resources, training and lessons, and earn badges and certificates; while connecting and collaborating with educators from around the globe.



SOURCE: Speak Up Research Project for Digital Learning. 2017 Findings - listening to the authentic, unfiltered views of 406,779 K-12 students, parents, and educators from around the world, including 33,156 teachers. Data was collected from October 2017

2. Professional Development for PRDOE teachers – 30,000 teachers - Pathway to Innovation - Teacher Track

The first year will focus on basic skills in technology use and the existing platforms of the PRDOE to ensure teachers feel comfortable with a solid start towards effective technology integration in the classroom. The first year is also one of frequent assessments to determine teachers' levels of technology use and integration. These assessments will provide essential data to address existing barriers and challenges towards advancing curriculum and technology integration in the classroom. Teachers will be evaluated and depending on their actual knowledge they will be assigned between 18 and 36 hours of training both in person and online. To carry out the on-lines trainings, a Learning Platform will be used to help create effective online teaching and learning experiences in a collaborative, but at the same time private personal environment to all the participants.

The second year will focus on reinforcing the use of PBL through the use of technology and introducing the Blended Learning Model. These learning strategies will provide teachers and schools a variety of technology-enabled learning zones optimized for collaboration, informal learning, and individual-focused study. The third year of professional development will focus in using technology to differentiate instruction and provide formative assessment with free tools for teachers. Also, the use of the Microsoft Educator Community (MEC) free platform for continuing professional development will be promoted. Recognizing the possible changes in human resources in the teaching staff of the PRDOE, we will include a new cohort to train these new teachers in the DEOPR system for the second and third year.

The Technology Plan provides training to teachers in the use SAMR model. This model provides success indicators for each goal that identifies what successful implementation will look like. These are written as observable actions such as "Teachers in special program will actively use the SAMR model as a tool for record all the professional development during this project." Dr. Rueben Puentedura (2011) developed the SAMR model which was designed to help educators integrate technology into teaching and learning. The model aims to enable teachers to design, develop, and integrate digital learning experiences that utilize technology to transform learning experiences to higher levels of achievement for students, to meet learning outcomes. Following is a brief explanation about each of the stages of the SAMR model. Figure: Substitute, Augmentation, Modification, Redefinition SAMR - Models for Enhancing Technology Integration.

Transformation

R Redefinition	tech allows for creation of new tasks previously inconceivable	integrated movies, hot links, software, apps,	Skype with experts, compare, combine results via wikis and blogs, publish world wide online
M Modification	tech allows for significant lesson redesign	integrated email graphs, images spreadsheets	spreadsheets, graphs, email with others, redesign lab, hand in
A Augmentation	tech is a tool substitute with some improvement	word processing with spell check, cut and paste	grammar, spell check, cut, paste, print, hand in
S Substitution	tech is a tool substitute with no functional change	word processor used as a typewriter	word process lab report, print out, hand in

Enhancement

If this project had an extension for a fourth year, we recommend working with **Mentor Programs** and **Tech Resources Contributors** for teacher leaders within the PRDOE (200 leaders) in order to achieve sustainability. These teachers will be selected based on their credentials and achievements during the past three years. The Tech Mentors Academy goal is to prepare mentor teachers to help other teachers to integrate technology effectively in the classroom. The Academy will cover advanced aspects of online collaboration with Office 365 Teams and Skype Apps, integration technologies using new methodologies and global citizenship, among other topics. On a preliminary basis we propose 24 hours of face-to-face training and 10 hours of on-line training to prepare these mentors. After these training sessions, the **Tech Mentors** must commit to leading at least 12 hours of workshop sessions in the course of each subsequent school year in their respective educational regions. Sessions may be 2 – 3 hours in duration and the **Tech Mentors** will receive either professional development hours or a stipend for the delivery of the workshop session(s), subject to PRDOE approval. Topics and descriptions for these workshops will be submitted to the Coordinator of Educational Technology for review and approval.

Tech Resources Contributors - Leaders, Specialists and Technology Teacher

The Tech Resources Contributors will commit to provide a minimum of 6 items/activities to be published at the LEA's technology tutorial resources web page. Tutorials may be in the form of multi-media presentations (PowerPoint, Sway, Prezi, Powtoons, Screencasts, etc.) or documentation including graphics (screenshots) along with text explanations. Professional development time may be earned for each resource accepted into the LEA's technology web page.

Tutorials must meet the criteria of the Technology Tutorial Rubric prior to acceptance into the tutorial library. Tutorials will be submitted to the Coordinator of Educational Technology for review and approval.

Example Rubric

	Tech Mentors and contributors - Resources Rubric			Total
Category	Outstanding (3)	Satisfactory (2)	Needs revision (1)	
Content	Covers topic in - depth with details and examples. Subject knowledge is excellent.	Includes essential knowledge about the topic. Subject appears to be good.	Includes essential information about the topic but there are 1-2 factual errors.	
Organization	Content is well organized and transitions logically from topic to topic	Content is organized and includes transitions from topic to topic	Content is minimally organized, transitions are missing or not clear	
Presentation	Well-rehearsed with smooth, clear delivery that holds audience attention. Must be a minimum of 3 minutes in length Includes at least 2 of the following: 1) text 2) visuals 3) audio 4)animation 5) transitions	Rehearsed with fairly smooth, clear delivery that holds audience attention most of the time. Must be a minimum of 3 minutes in length Includes at least 2 of the following: 1) text 2) visuals 3) audio 4)animation 5) transitions	Delivery not smooth, or not clear, or does not hold audience attention. Less than 3 minutes in length Contains less than 2 of the following: 1) text 2) visuals 3) audio 4)animation 5) transitions	

Notes

3. Digital Material and Curriculum Integration

As part of the service, content will be created to promote the integration of technology throughout the curriculum. With the OSIATD's support a repository will be enabled using the SharePoint spaces of the PRDOE. Candidates will create five lessons of basic technology integration skills per grade kinder to twelve grade (*see Appendix D - Educational Technology and Online Learning Scope and Sequence*). Teachers will be able to use these lessons in an easy and accessible way when planning their classes. All material created will be aligned with 21st century skills and ISTE standards. At the end of three years each grade will have 15 lessons of technology integration in Spanish and English. In addition to lessons, the Educator Trainers will create digital materials in video format, with demonstration of technology tools and diverse topics. At the end of the third year of implementation, the repository will have a total of 24 videos 3 -5 minutes in length. These videos can include demos, best practices and case studies in the Puerto Rico school community (*see Appendix E for videos examples*).

Important Note: All recommendations and suggestions for initiatives during the fourth year and beyond are not included in the budget provided.

References for PDP

1. Fundamental of Blended Learning 2013
http://www.uws.edu.au/data/assets/pdf_file/0004/467095/Fundamentals_of_Blended_Learning.pdf
 2. Chappuis, S., & Chappuis, J. (2008). The best value in formative assessment. *Educational Leadership*, 65(4), 14–19.
 3. Bill & Melinda Gates Foundation. (2015). Reaching the summit of data-driven instruction. Retrieved from <http://collegeready.gatesfoundation.org/2015/06/summit-of-data-driven-instruction/>.
 4. “Teachers, Teaching, and ICTs.” InfoDev Growing Innovation.
<http://www.infodev.org/articles/teachers-teaching-and-icts>
 5. Ibid.
 6. Moeller, B., T. Reitzes. “Integrating Technology with Student - Centered Learning.” Education Development Center, Inc. July 2011.
<http://www.nmefoundation.org/getmedia/befa9751-d8ad-47e9-949d-bd649f7c0044/integratin>
- h.** Device Tracking. Computerlink’s device tracking solution is a multi-purpose tool that among its many features, prevents loss and theft and assists law enforcement agencies in recovering lost devices. The following are all the features included in the tracking tool

Device Theft Prevention

Prevent loss and theft. Device loss and theft interrupts learning, burdens IT, and poses a safety threat to schools and communities. Keep technology in the hands of students with Safe Schools, a turnkey solution from Absolute that teaches students to be

responsible, theft-aware users. The program includes evaluations, training, device tagging and a device database, and lost-and-found returns. When needed, the Absolute investigations team can recover stolen devices in concert with local law enforcement. Services include Rapid Response Service once a theft is reported; court-ready investigative reports; and a recovery service guarantee (conditions apply).

Absolute® brings a fundamentally new approach to cybersecurity by enabling self-healing endpoint security to ensure uncompromised visibility and near real-time remediation of breaches at the source. Our cloud-based platform and embedded Persistence technology puts IT and security professionals in control of devices, data, and applications — whether they are on or off the network to improve IT asset management, ensure compliance, protect data, and reduce insider threats. Patented Persistence technology is embedded in the firmware of more than 1 billion popular PC and mobile devices from global manufacturers including Acer, Asus, Dell, Fujitsu, HP, Intel, Lenovo, Microsoft, Panasonic, Samsung and Toshiba.

bsolute, formerly Absolute Data & Device Security (DDS), is an adaptive endpoint security solution. Its technology platform is a client/server architecture that delivers device security, data security, and asset management of endpoints, even if a device is off the network or in the hands of an unauthorized user.

The persistent connection between the secure and patented agent (client) and the Absolute Monitoring Center (server) ensures organizations have protected access to up-to-date information about their entire device inventory. Authorized users can use the built-in tools in the Absolute console, formerly DDS console, to track devices and initiate data and device security operations for the purposes of enforcing compliance policies, identifying at-risk computers, and taking preemptive and reactive measures if a security incident occurs

PROTECT STUDENTS AND DEVICES: Avoid learning interruptions by ensuring the devices stay in the hands of the students. Safeguard your devices and students from theft and crime with uncompromised visibility and control over each and every device. Pre-empt security incidents by delivering insight into suspicious activity or inappropriate device usage that may pose harm to students.

ABSOLUTE SAFE SCHOOLS: To proactively promote a safe school environment for students and faculty, the Absolute Safe Schools program helps educate users about device safety—teaching students and staff best practices in how to avoid scenarios where students and devices may be at risk. This program is delivered by security experts and includes theft deterrent materials that increase awareness within the community and prevent the school and the students from being targets.

THEFT RECOVERY: If a device is stolen, our Investigations team will work with your local law enforcement to recover the device, saving you time and money. If the device is unrecoverable, we offer a service guarantee that reimburses you for the cost of the device (conditions apply).

Student Technology Analytics: Analyze technology usage and ROI metrics across Windows, Mac and Chromebooks, from a single console.

Asset Reporting & Analytics: Collect detailed information from each device, on and off your network. Assess your posture via the Security Vitals Dashboard.

Endpoint Data Discovery: Discover and remediate sensitive data, including PHI and PII. Create custom data discovery settings. Identify sensitive data synced with cloud storage apps.

Geo-Technology: Track recent and historical locations of devices. Create geofences and out-of-bounds alerts.

Risk Assessment: Preempt security incidents via policies and alerts. Monitor the status of critical applications including antimalware, encryption, and SCCM.

Risk Response: Enable security measures including offline policies. Freeze devices and send messages to end users. Prove compliance of endpoints. Recover or delete data. Remediate devices anywhere via Absolute Reach.

Endpoint Investigations: Locate and recover devices. Determine if a breach notification is required

i. Requirements.

PORTABLE COMPUTING DEVICE SPECIFICATIONS

Instructions: Complete this worksheet for each type of technology solution proposed. Fill in each blank with the requested information. You may attach additional pages to provide complete information where required. This RFP does not require that all these fields be accounted for, but if a proposer is providing an option that fits one of these categories, these fields must be completed. Please specify which items are optional, if any. If additional items (fields) need to be added to this list of products and services to best reflect your proposed solution, please make note of this, and add any necessary data.

Laptops

HP ProBook X360 11 EE G1
Portable Device Description

Manufacturer	HP
Model	ProBook x360 11 G1 EE
Processor Speed	1.1 GHz up to 2.5 GHz
Chip Manufacturer	Intel
Chip Type	Integrated
Number of Processor Cores	4 Cores
Number of Video Cores	UMA only, 1 core in processor
Amount Random Access Memory	4 GB
Amount of Random Access Memory Dedicated to CPU	3 GB (Depends on configuration)
Operating System	Windows 10
Wireless Type (ex. 802.11 a/b/g/n/ac)	802.11a/b/g/n/ac
Wireless Speed (ex. 150/1000)	2.4 GHz - 5.8 GHz
Hard Drive Type	SSD
Hard Drive Capacity	128GB
Audio Chipset Manufacturer	Conexant
Video Chipset Manufacturer	Intel
Front Camera Resolution (Still/Video)	1MP HD Webcam
Back Camera Resolution (Still/Video)	2MP FHD Webcam
Display Size	11.6"
Display Resolution	HD (1366 x 768)
Number of Touch Points	10 touch points
USB Port Type and Count	(2) USB 3.1 Gen 1 Type-A / (1) USB Type-
Keyboard size	Full Size (27.6cm Diagonal) 10x26 cm
Optional input device	None
Battery Capacity (ex. 7200mAh)	3700mAH. Charge to 90% in 90 mins
Duration (ex. 8 hrs.)	Battery life up to 10.5hrs (for SSD)
Weight	3.19 lbs.

Provide industry benchmark test results, including information about how long the device will operate on a single battery charge under these conditions:

Activity	Time
Web-browsing	Estimated time 8hrs
Multimedia (video/audio)	Estimated time 6hrs
Reading eBooks	Estimated time 7hrs
Stand by time	Estimated time 10 Hrs

Tablets

HP X2 210 G2

PORTABLE COMPUTING DEVICE SPECIFICATIONS

Instructions: Complete this worksheet for each type of technology solution proposed. Fill in each blank with the requested information. You may attach additional pages to provide complete information where required. This RFP does not require that all these fields be accounted for, but if a proposer is providing an option that fits one of these categories, these fields must be completed. Please specify which items are optional, if any. If additional items (fields) need to be added to this list of products and services to best reflect your proposed solution, please make note of this and add any necessary data.

Portable Device Description

Manufacturer	HP
Model	HP x2 210 G2
Processor Speed	1.44GHz up to 1.92 GHz
Chip Manufacturer	Intel
Chip Type	Integrated
Number of Processor Cores	4 Cores
Number of Video Cores	UMA only. 1 core in processor
Amount Random Access Memory	2 GB
Amount of Random Access Memory Dedicated to CPU	512 MB (Depends on configuration)
Operating System	Windows 10
Wireless Type (ex. 802.11 a/b/g/n/ac)	802.11a/b/g/n/ac
Wireless Speed (ex. 150/1000)	2.4 GHz - 5.8 GHz
Hard Drive Type	eMMC
Hard Drive Capacity	32GB
Audio Chipset Manufacturer	Conexant
Video Chipset Manufacturer	Intel
Front Camera Resolution (Still/Video)	1MP HD Webcam
Back Camera Resolution (Still/Video)	5MP FHD Webcam
Display Size	10.6"
Display Resolution	WXGA (1280 x 800)
Number of Touch Points	10 touch points
USB Port Type and Count	(1) USB 3.0 Type-A / (1) USB Type-C
Keyboard size	N/A
Optional input device	None
Battery Capacity (ex. 7200mAh)	4000mAH. Charge to 50% in 30 mins
Duration (ex. 8 hrs.)	Battery life up to 10hrs
Weight	1.30 lbs.

Provide industry benchmark test results, including information about how long the device will operate on a single battery charge under these conditions:	
Activity	Time
Web-browsing	Estimated time 8hrs
Multimedia (video/audio)	Estimated time 6hrs
Reading eBooks	Estimated time 7hrs
Stand by time	Estimated time 10hrs

Additional Information on Minimum Device Specifications:

Ports and Print Services

The HP ProBook X360 11 EE notebook and the X2 210 G2 Tablet connect to standard video output devices such as digital projectors, smart boards, computer monitors, and TVs using for example the HDMI port or the Micro HDMI port in the case of the X2 210. Both devices have a wireless card Intel® 802.11 a / b / g / n / ac (2x2) compatible with the technology Miracast. Miracast is a wireless technology where these devices can project the screen to TVs, projectors, and streaming media players that also support Miracast. PRDE can use Miracast to share what the student or the teacher is doing on the device and present a slide show. Both devices have the capability to print. In the case of the Notebook HP ProBook X360 PRDE can use the Wireless, USB ports or the RJ-45 port to print. In the case of the HP X2 210 can use wireless or USB ports.

The standard protocols supported for printing are: IPv4/IPv6: Compatible con Apple Bonjour (Mac OS 10.2.4 y posterior), SNMPv1/v2c/v3, HTTP, HTTPS, FTP, Puerto 9100, LPD, IPP, IPP secure, WS Discovery, IPsec/Firewall IPv6: DHCPv6, MLDv1, ICMPv6; IPv4: Auto-IP, SLP, TFTP, Telnet, IGMPv2, BOOTP/DHCP, WINS, Direct Mode IP, WS Print, others: IPX/SPX, AppleTalk, NetWare NDS, Bindery, NDPS, iPrint.

Device Power

The notebook HP ProBook X360 has a HP Long Life 3-cell, 41 Wh Prismatic battery with a battery life up to 10.30 hours. The tablet HP X2 210 has a HP 2- cell Lithium Polymer battery (32.5Whr) with a battery life up to 10.15 hours. According to Mobile Mark 2014 battery life will vary depending on various factors including: configuration, loaded applications, features, use, wireless functionality, and power management settings. The maximum capacity of the battery will naturally decrease with time and usage. The battery can be recharged through the cart or through the power supply included with each device. Both devices can be powered/charged by a standard electrical outlet. The HP ProBook X360 includes an HP 45W Smart AC adapter with a recharge time of 90% in 90 mins and the X2 210 includes an HP 45W USB Type-CTM AC adapter with HP Fast Charge of 50% in 30 minutes.

The strategy to ensure sufficient battery life for 8 hours of daily school is to configure the device with:

- "Battery Saving" enabled (<https://docs.microsoft.com/en-us/windows-hardware/design/component-guidelines/battery-saver>)
- Use a dark theme or background
- Bluetooth off
- Deactivate the location
- Reduce the synchronization frequency of emails, contacts and calendars

Additional recommendations:

- o Keep the equipment connected until it is fully charged
- o Activate airplane mode if you do not need Internet, Bluetooth or other types of wireless communication.

Device Connectivity

Both devices include Intel® 802.11 a/b/g/n/ac (2x2) +Bluetooth® Combo. This Wireless include two embedded dual band 2.4/5 GHz antennas provided to the card to support WLAN MIMO communications and Bluetooth communications.

Device Portability

The Notebook HP ProBook X360 has a weight of 3.0 pounds with a dimension of (w x d x h) 8.14 x 11.88 x 0.78 in. The HP X2 210 has a weight of 1.3 pounds with a dimension of 10.43 x 6.81 x 0.93 in.

Device Durability

In terms of durability the HP ProBook x360 11 passed MIL-STD 810G testing with rugged features such as co-molded rubber trim, spill- and pick-resistant keyboard, and Corning® Gorilla® Glass 4 touch screen. In the case of the HP X2 210 tablet we include a rugged case that sustains a four-foot drop. Since all devices include an accidental warranty, they'll be fixed or replaced in case of an accident so the DEPR doesn't have to intervene or worry about it.

Ergonomics

HP Cares About the Comfort, Productivity and Well-Being of the customers. In this link the PRDE can review the guidelines describing proper device setup, posture, health and work habits for computer users, as well as electrical and mechanical safety information for all HP products.

<http://www8.hp.com/us/en/hp-information/ergo/index.html>

Device Theft Prevention

Prevent loss and theft. Device loss and theft interrupts learning, burdens IT, and poses a safety threat to schools and communities. Keep technology in the hands of students with Safe Schools, a

turnkey solution from Absolute that teaches students to be responsible, theft-aware users. The program includes evaluations, training, device tagging and a device database, and lost-and-found returns. When needed, the Absolute investigations team can recover stolen devices in concert with local law enforcement. Services include Rapid Response Service once a theft is reported; court-ready investigative reports; and a recovery service guarantee (conditions apply).

Absolute® brings a fundamentally new approach to cybersecurity by enabling self-healing endpoint security to ensure uncompromised visibility and near real-time remediation of breaches at the source. Our cloud-based platform and embedded Persistence technology puts IT and security professionals in control of devices, data, and applications — whether they are on or off the network to improve IT asset management, ensure compliance, protect data, and reduce insider threats. Patented Persistence technology is embedded in the firmware of more than 1 billion popular PC and mobile devices from global manufacturers including Acer, Asus, Dell, Fujitsu, HP, Intel, Lenovo, Microsoft, Panasonic, Samsung and Toshiba.

Absolute, formerly Absolute Data & Device Security (DDS), is an adaptive endpoint security solution. Its technology platform is a client/server architecture that delivers device security, data security, and asset management of endpoints, even if a device is off the network or in the hands of an unauthorized user.

The persistent connection between the secure and patented agent (client) and the Absolute Monitoring Center (server) ensures organizations have protected access to up-to-date information about their entire device inventory. Authorized users can use the built-in tools in the Absolute console, formerly DDS console, to track devices and initiate data and device security operations

for the purposes of enforcing compliance policies, identifying at-risk computers, and taking preemptive and reactive measures if a security incident occurs

PROTECT STUDENTS AND DEVICES: Avoid learning interruptions by ensuring the devices stay in the hands of the students. Safeguard your devices and students from theft and crime with uncompromised visibility and control over each and every device. Pre-empt security incidents by delivering insight into suspicious activity or inappropriate device usage that may pose harm to students.

ABSOLUTE SAFE SCHOOLS: To proactively promote a safe school environment for students and faculty, the Absolute Safe Schools program helps educate users about device safety—teaching students and staff best practices in how to avoid scenarios where students and devices may be at risk. This program is delivered by security experts and includes theft deterrent materials that increase awareness within the community and prevent the school and the students from being targets.

THEFT RECOVERY: If a device is stolen, our Investigations team will work with your local law enforcement to recover the device, saving you time and money. If the device is unrecoverable, we offer a service guarantee that reimburses you for the cost of the device (conditions apply).

Student Technology Analytics: Analyze technology usage and ROI metrics across Windows, Mac and Chromebooks, from a single console.

Asset Reporting & Analytics: Collect detailed information from each device, on and off your network. Assess your posture via the Security Vitals Dashboard.

Endpoint Data Discovery: Discover and remediate sensitive data, including PHI and PII. Create custom data discovery settings. Identify sensitive data synced with cloud storage apps.

Geo-Technology: Track recent and historical locations of devices. Create geofences and out-of-bounds alerts.

- 1- Using the mobile carts you can recharge the devices automatically on a single 15amp ac outlet. You can also connect the devices to a master synching/charging station.
- 2- Ability to configure user profiles, RED features, security features, among others, through the tools hosted in Microsoft Windows / control panel.
- 3- Restoring
- 4- By rotating the screen 360 °, it is possible to locate it on the back of the equipment, allowing it to be operated as an electronic book.
- 5- Reading and updating capacity under the Microsoft Windows tools (MS Office, Word Pad, Notepad, MS Photos) and Adobe Acrobat Reader embedded on the installed DEPR software image.
- 6- Storage capacity in the HP ProBook X360 is a 128GB SSD that allows data to be stored locally. On the HP X2 210 G2 local data is stored on a 32gb eMMC drive.

- 7- Installation and execution compatibility through Microsoft Windows for Microsoft Office 365 solutions, which includes OneDrive.
- 8- Characteristic satisfied using Miracast between platforms with MS Windows 10 operating system.
- 9- Characteristic satisfied SCCM between platforms with MS Windows 10 operating system.
- 10- Please see response on 2.3.2.1.2 Digital Learning section.
- 11- Certified platform for its operation and compatible accessories with Microsoft Windows systems.
- 12- Capacity to update and download HP applications through the portal www.hp.com or Microsoft applications through the app (Store).
- 13- Ability to reprogram the device in BIOS / Boot for a reduction of time at the start.

Risk Assessment: Preempt security incidents via policies and alerts. Monitor the status of critical applications including antimalware, encryption, and SCCM.

Risk Response: Enable security measures including offline policies. Freeze devices and send messages to end users. Prove compliance of endpoints. Recover or delete data. Remediate devices anywhere via Absolute Reach.

Endpoint Investigations: Locate and recover devices. Determine if a breach notification is required

Custom Imaging and Configuration

UDT Response:

UDT is readily available from an imaging consultation standpoint to ensure the best possible imaging and configuration processes are utilized. As a standard practice, UDT's Configuration Technical Engineer will meet with the designated team members to discuss image requirements and streamline the images accordingly to verify within the end user environment. The process for image creation and verification is listed below:

Image Verification Process

- 1) Pre-Image Development Meeting
 - a. UDT's technical team will meet with end user technical representatives to discuss and finalize image, configuration and BIOS requirements and discuss configuration options if required
- 2) Post Meeting Image Creation (if applicable)
 - a. Upon Completion of image requirement gathering, UDT's Configuration technical team will assist in the development of images to meet end user IT requirements
- 3) Image Deployment
 - a. UDT will push the image to test units and deliver to end user IT for environment verification to ensure the image is configured properly and all software is working as planned.
- 4) Image Upload (Pending image approval)
 - a. If no image adjustments are needed, image is rolled into production environment for image push
 - b. If image adjustments are needed, end user team & UDT will perform image adjustments and re-verification will occur to confirm successful image push

UDT will provide access to all successfully verified images via secure FTP location. This will allow end user IT access to the images as needed (if applicable). In addition, and if requested, UDT will update all images on a pre-determined basis set by end user IT (if applicable). As a standard practice, UDT updates critical Windows updates on a quarterly basis but this can be adjusted on an as needed requirement by end user. Lastly, any new hardware products that are introduced into end user portfolio will also follow the above image creation and verification process. This will ensure a consistent set of images are deployed across all products and will reduce any configuration issues at site locations.

UDT follows a standard guideline for documenting all image creation and updates as requested by end user IT. This documentation will be provided as needed to designated representatives to ensure the proper flow of communication is adhered to when it comes to image configuration. Any image update that is performed will have an image approval document sent with it that will highlight any changes to the image. All units imaged can have an image version number associated with it within the UDT Asset Management System (DART). In the unlikely event that there appears to be an issue at site locations caused by the image, this will allow UDT and end user IT to easily discover which units have this particular image and where they are located.

Etching

UDT Response:

UDT will utilize its expertise around the etching process to work with the district to continue to update their requested laser etching logo and verbiage. DEPR provides any combination of logos, verbiage, warranty information and/or asset information to be etched on the units. This can be fully customized to meet the demands of DEPR. UDT will provide



Figure 3 - Sample Etch

DEPR sample images with the requested etching configuration for verification prior to introduction to the production environment

Configuration, Delivery and Deployment Services

The assigned Computerlink project manager will work in unison with the customer support team assigned to manage the logistics and delivery schedules of all orders. Computerlink always coordinates with your assigned site personnel to produce a delivery calendar for day to day orders and a true project schedule for managed deployments of summer rollout sites or 1:1 devices.

UDT's state-of-the-art 35,000 SQ Ft Configuration Center facility, located at 9436 Southridge Park Ct, Orlando, FL 32819, 227 miles from the district office. This configuration center is purpose built and designed to support K-12 technology environments.

Since its inception in 2009, UDT's Configuration Center has successfully imaged, etched, asset tagged and deployed more than 1 Million assets throughout various customer environments. Through this extensive experience, UDT has implemented and evolved a set of best practices to assist its customers in implementing successful technology plans and ensure that the imaging, asset management, delivery and integration processes are seamless and efficient.

Asset & Inventory Management

Upon configuring and shipping the requested order, all required information will be entered into the UDT OMS for basic reporting and asset management and UDT is including its DART tool for enhanced analytics and visibility into asset management. A complete report will be provided to the designated PRDE representative showing all customized information as pre-determined during initial process flow generation. This includes, but is not limited to:

- 9) PO and appropriate order information
- 10) Serial and product number information of new hardware
- 11) Site delivery location of all new hardware (name, office number, etc...)
- 12) IP, asset number and naming information of all new hardware installed
- 13) Image version number installed on new hardware
- 14) Serial and asset information for all removed hardware
- 15) Sign-off documentation
- 16) Any additional information deemed necessary by PRDE

Information about UDT's Device Assignment & Reallocation Tool (DART)

UDT's DART has been designed with the needs of specialized technology implementations in mind. The ability for customers to deploy, track and manage all of its assets through a simple, yet customizable, tool is critical to the daily needs of any operation. IT Asset Management shouldn't be difficult and that is exactly what UDT has set out to do with the development of its DART. Successfully govern your IT asset landscape all while providing real-time reports and capabilities to ensure a one-stop solution for tracking assets.

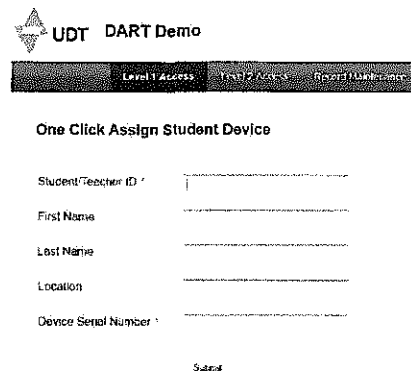
The below information provided within this document is to provide overall information regarding UDT's DART and demonstrate the flexible customization options that can be provided and tailored around your specific environment and requirements.

- 7) One Click Functionality for ease of use
 - a. One Click Assignment to perform initial device assignment
 - b. One Click Return to check devices back into inventory

- c. One Click Status Change to change the status to lost, stolen, damaged, in repair, etc...
- 8) Extensive Analytics and Reporting
 - a. Ability to fully customize district required reports
 - b. Full export feature options to create editable and working reports
 - c. Automated report generation to provide reports at your pre-determined time settings
 - d. Report on any field within the DART to provide complete transparency into your district devices and inventory
- 9) Permissions and Security Based
 - a. Custom permissions to allow level 1 access through district admin access
 - b. Provide assign only functionality to site admin's
 - c. Can provide ticket entry to district techs
 - d. Allow site users to have only visibility to their location
 - e. District admins to have visibility district wide
- 10) Data Feed and Asset Upload
 - a. UDT performs initial entry into DART from its Configuration Center
 - b. User ID feed transfer into DART nightly (or per district request - optional)
 - c. User feed allows for real time information and simplifies device assignment
 - d. Ability to mass upload district devices if needed or perform single asset entry
- 11) Asset History Logs
 - a. Logs – Provides complete historical view of device, user and/or location
 - b. Anytime a device is edited within DART, it is automatically logged and tracked
- 12) Support Portal
 - a. Ability to enter service tickets directly into DART for ease of access into one system
 - b. Tracks all service events by serial number for historical purposes
 - c. Provides district full view into their warranty support

3) ONE CLICK ASSIGNMENT

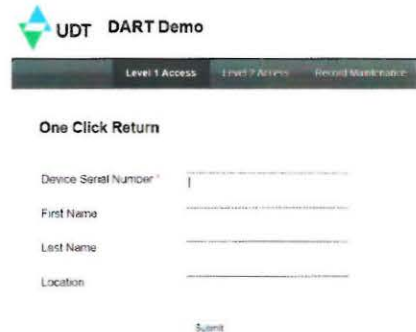
- a. Used to easily assign devices to specific users at a site location (or can be used to assign to building, school, room, office, etc...depending on your specific requirements)
- b. User ID numbers are fed live into the DART on a nightly basis to ensure real time user data
- c. This live feed allows a user or site admin to simply scan/type in ID number and the name and location fields will automatically populate
- d. Scan in device serial number to assign and click submit to assign device to appropriate user



The screenshot shows a web interface titled "UDT DART Demo". At the top, there are three tabs: "Level 1 Access", "Level 2 Access", and "Root Management". The main heading is "One Click Assign Student Device". Below this, there are five input fields: "Student/Teacher ID", "First Name", "Last Name", "Location", and "Device Serial Number". Each field has a corresponding text input area. At the bottom right of the form, there is a "Submit" button.

4) ONE CLICK RETURN

- a. Used to return the device back into site inventory and un-assign from user, location, office, etc...
- b. Has the functionality to un-assign a device and reassign new device in one-click
- c. Scan or type in device serial number and the user information will auto populate, hit submit and the device is returned to an unassigned status



UDT DART Demo

Level 1 Access | Level 2 Access | Record Management

One Click Return

Device Serial Number*

First Name

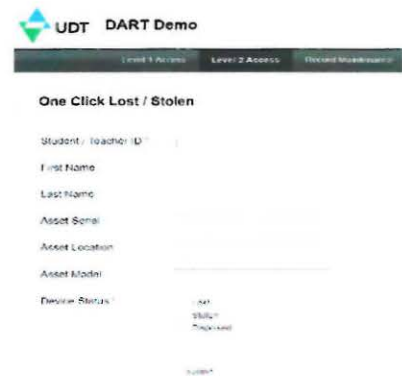
Last Name

Location

Submit

ONE CLICK LOST/STOLEN

- d. Used to quickly move a device to a lost or stolen status in the event a user or location misplaces a device
- e. Scan or type in used ID number and device information will populate automatically
- f. Select the appropriate status to move the device to and hit submit
- g. Status options are customizable to meet district requirements



UDT DART Demo

Level 1 Access | Level 2 Access | Record Management

One Click Lost / Stolen

Student / Teacher ID*

First Name

Last Name

Asset Serial

Asset Location

Asset Model

Device Status*

Submit

5) ASSETS VIEW

- a. This view shows all assets within the district and can be filtered by any field for items such as:
 - i. Devices that are operational status only
 - ii. Only devices at a certain location
 - iii. Only devices assigned to grade level
 - iv. Devices by model type
- b. Fields and filters are fully customizable to capture data requested by district
- c. All information exportable to PDF, CSV, Excel, HTML, etc....
- d. Auto reports can be sent based on any filtered status sent to any district resource at any pre-determined timeframe

Asset ID	Location	Asset Type	Model Name	Assigned To	Owner Name	Warranty Status	Warranty End	Asset Status	Serial	Asset Description	Assigned Date	Asset Location	Asset Price	Asset Status
1000	San Juan	Tablet	ASUS ME571C	Unassigned	1121	GENESIS	AVILES	06	CND4345345	Yes	HP 210 G1 PC	2501	Swan	Operational
1001	San Juan	Tablet	ASUS ME571C	Unassigned	R. GARCIA	TABLET CART			CND43599M4	No	Del Latitude 13	5701	Operational	Operational
1002	San Juan	Tablet	ASUS ME571C	Unassigned	4051	CART			8D66122X2	No	HP A360 310 G2 PC	4001	Operational	Operational
1003	San Juan	Tablet	ASUS ME571C	Unassigned		CART			5CE9897Y-F	No	HP Piv Tablet 10 EE G1	1201	Operational	Operational
1004	San Juan	Tablet	ASUS ME571C	Unassigned		MID - TABLET CART			CND4358J47	No	Lenovo 15e	5701	Operational	Operational
1005	San Juan	Tablet	ASUS ME571C	Unassigned					CND4364229	No	HP ElitePad 1000 G2 T	5841	Operational	Operational
1006	San Juan	Tablet	ASUS ME571C	Unassigned		MONTES - TABLET CART			5CE212B22	No	HP Piv Tablet 10 EE G1	5701	Operational	Operational
1007	San Juan	Tablet	ASUS ME571C	Unassigned		CART			8D661259YH	No	HP A360 310 G2 PC	7111	Operational	Operational
1008	San Juan	Tablet	ASUS ME571C	Unassigned		MID - TABLET CART			CND4364R40	No	Del Latitude 13	5121	Operational	Operational

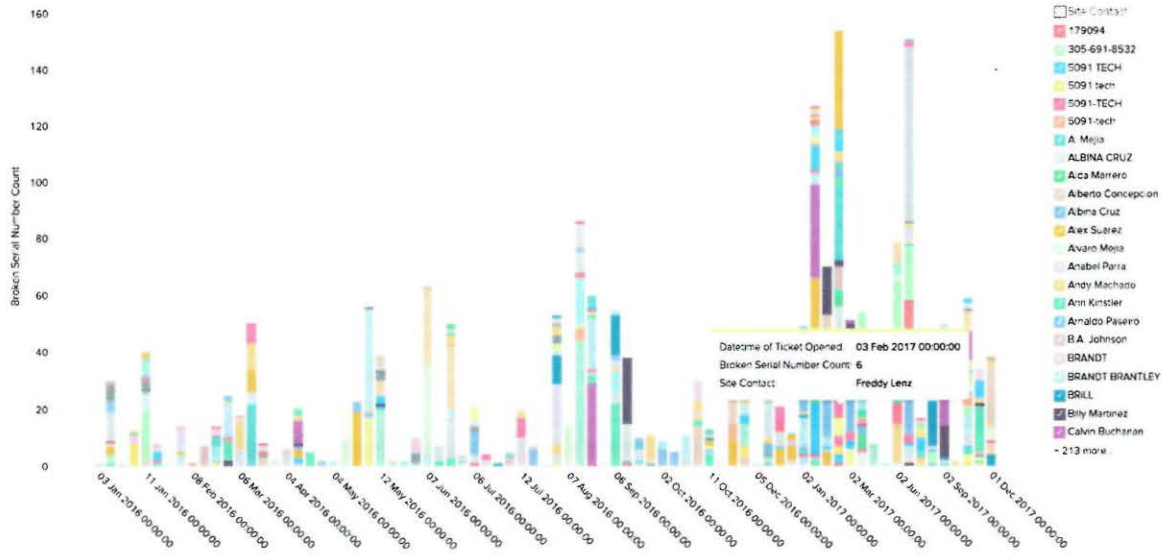
6) GLOBAL REPORTS

- a. Fully customized reports to meet district requirements including, but not limited to:
 - i. Number of units per location (below)
 - ii. Number of units per status (operational, in repair, damaged, etc...)
 - iii. Number of in warranty units per location or in the district
 - iv. Number of devices in assigned status across the district or by location
 - v. Site level reports to show any filtered results such as status, assigned, warranty tickets, etc...
- b. All reports are customizable and include active data (meaning, by clicking on any graphic in a report, it will display the data that makes up the report)
- c. Reports can be of any graphic (pie chart, bar graph, etc...)
- d. DART allows for any field to be turned into a report which allows the district to generate their own unique reports

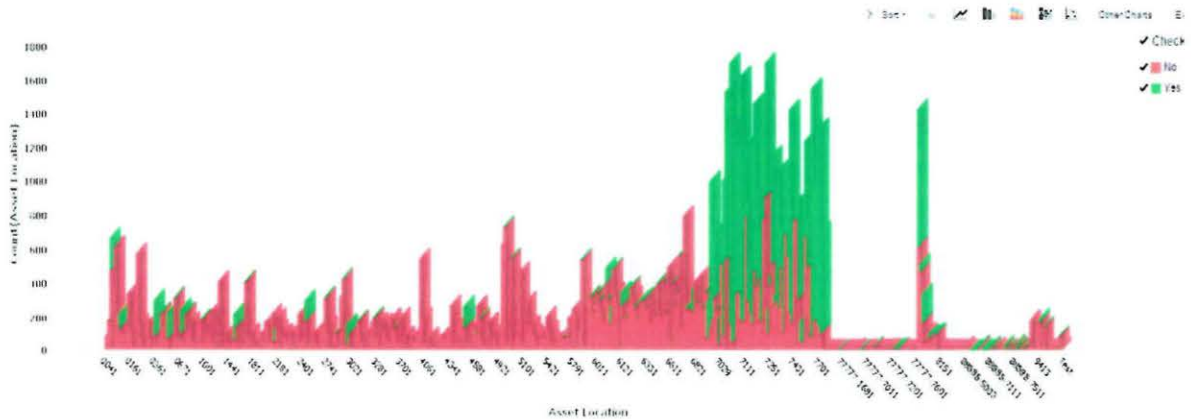
UDT DART Demo

Level 1 Access | Level 2 Access | Record Maintenance | Entry Forms | Views | Global Reports | Exit

Broken Units Per Month

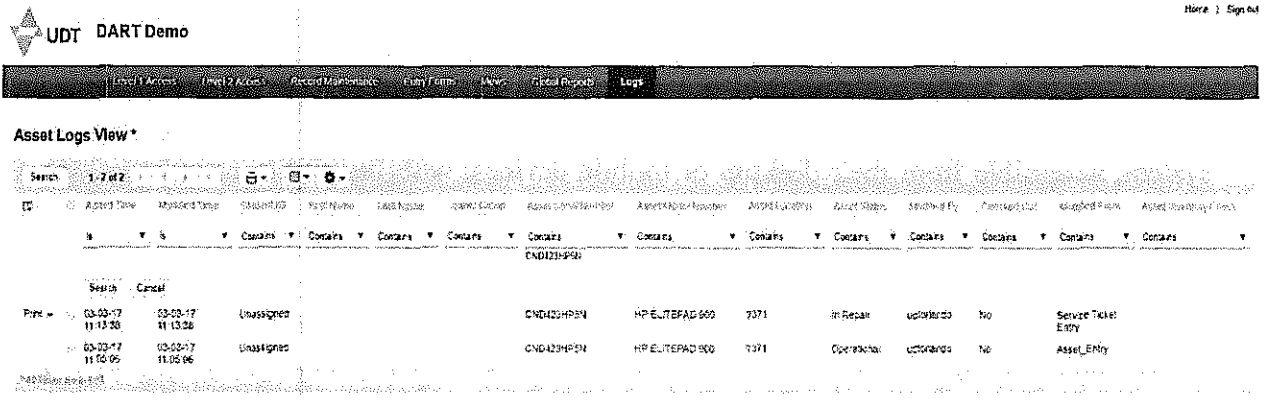


Number of Assigned Devices Per Location



7) ASSET LOGS

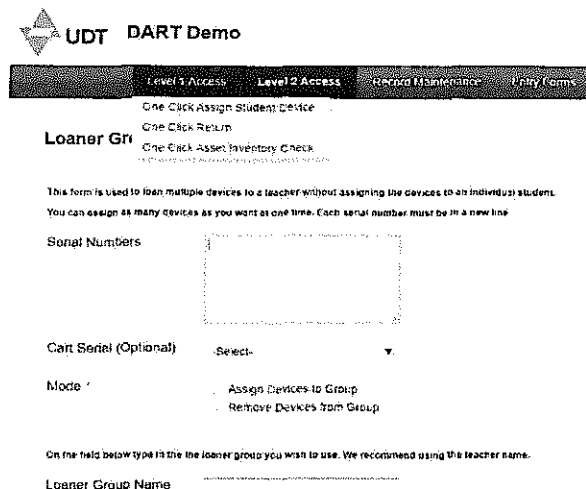
- a. All asset activity within the DART are logged for historical purposes, some of the included log data is listed below:
 - i. Serial number history by location or assignment
 - ii. User historical data including all devices assigned to the user
 - iii. Support log for all service tickets placed against the serial number
 - iv. The login credentials used to make any asset changes in the DART
 - v. Status history of the asset (Operational, in repair, etc...)
- b. All log information is customized to meet district criteria



The screenshot shows the 'Asset Logs View' interface in the UDT DART Demo. It features a navigation bar with options like 'Level 1 Access', 'Level 2 Access', 'Record Maintenance', 'Entry Forms', 'New', 'Fixed Records', and 'Logs'. Below the navigation bar, there's a search bar and a table of asset logs. The table has columns for 'Serial Number', 'Asset Name', 'Asset Location', 'Asset Status', 'Assigned By', 'Assigned Date', and 'Asset Inventory Check'. Two rows of data are visible, both for 'HP ELITEPAD 900' devices with serial number 'OND423HPFN'.

8) LOANER GROUPS

- a. Loaner groups are used when the district may not assign devices to individual users at a site location but rather to a classroom, room, building, office, lab, or testing environment temporarily
- b. Allows the ability to mass upload assets to assign to these loaner groups



The screenshot shows the 'Loaner Group' form in the UDT DART Demo. It includes a navigation bar with 'Level 1 Access', 'Level 2 Access', 'Record Maintenance', and 'Entry Forms'. The form has a title 'Loaner Group' and a description: 'This form is used to loan multiple devices to a teacher without assigning the devices to an individual student. You can assign as many devices as you want at one time. Each serial number must be in a new line.' There are input fields for 'Serial Numbers' (a text area), 'Cart Serial (Optional)' (a dropdown menu), and 'Mode' (radio buttons for 'Assign Devices to Group' and 'Remove Devices from Group'). At the bottom, there's a field for 'Loaner Group Name' with a note: 'On the field below type in the loaner group you wish to use. We recommend using the teacher name.'

2.3.3 Device Services: Technical Support Services

Computerlink will assign a dedicated device and configuration technical support team, including a project manager and helpdesk to support PRDE technical personnel during this project. This support will be available onsite throughout the entirety of Puerto Rico, remotely through remote management tools and e-mail, or over the phone through a dedicated phone line call center and helpdesk. Through these methods PRDE personnel will be able to receive the necessary assistance related to the project deployment, logistics, and technical support that they require

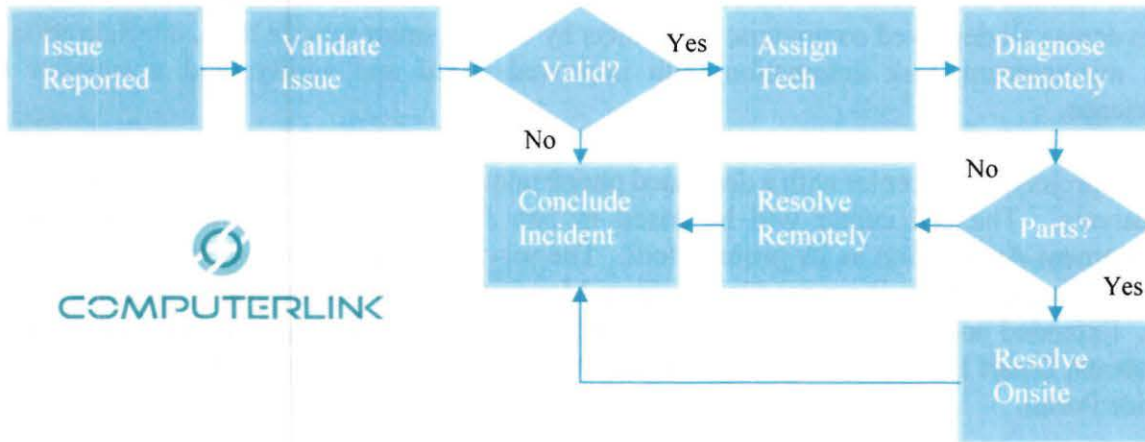
The assigned project manager will work closely with the designated PRDE personnel and personally focus on resolving any escalated issues. When required the project manager will engage the technical support team to arrive at a rapid resolution of any escalated issues and coordinate the involvement of any additional Computerlink or manufacturer resources.

Selected PRDE personnel will be given cloud-based access to our service incident ticketing system, accessible from their desktop or mobile devices, with the ability to open tickets, view progress, and access a targeted knowledge base actively populated with issues affecting the deployed systems.

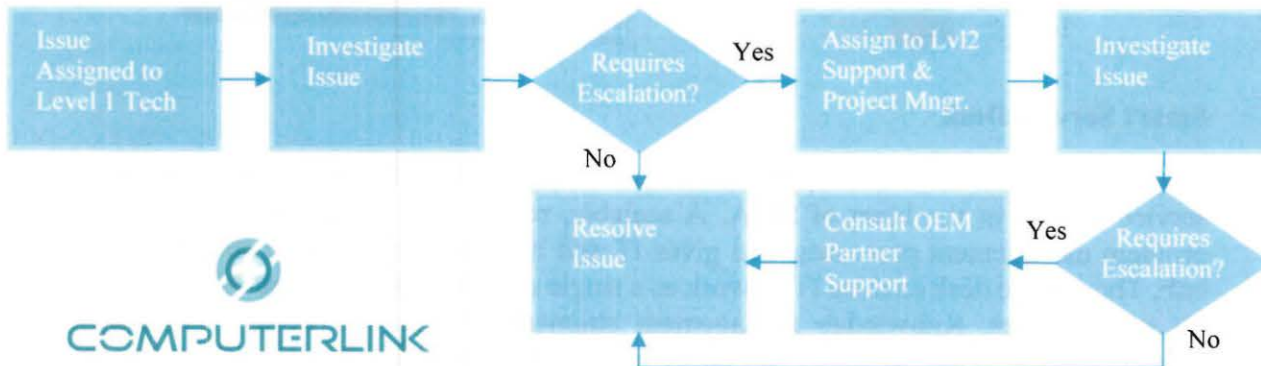
Computerlink will coordinate with the PRDE at their convenience to offer technical training to the PRDE technical support staff. This training will include a hardware overview of the deployed systems, tracking software, ticket generation procedures, and service portal overview and usage among other topics.

Our ticketing system has API capabilities and should be compatible with the PRDE ticketing systems. Since the Department's ticketing system is still in the process of being developed and no additional information was available at the time of this proposal, we would have to analyze the PRDE's ticketing system once it is complete to determine if there are any additional costs to ensure collaboration between the two systems.

Service Call Workflow



Escalation Process Workflow



Call Center/Help Desk

Computerlink will provide the PRDE a dedicated helpdesk that will offer phone, e-mail, online, mobile, remote, and virtual assistance, covering computer software, hardware, and configuration issues across all deployed computers, and tablets by using a smart service desk, configuration and asset management, task automation with improved speed and agility, and a superior user experience.

For this project, a call center with a dedicated phone number and 8 telephone lines will be assigned exclusively. The call center will be based in San Juan, PR and run Micro Focus Service Management Automation as its primary tool. The service center's hours of operation would be the same as the schools it covers (7am – 4pm, Monday through Friday) during regular business days. Extended hours of support will be available through Level 0 support in the form of Virtual Assistants, Smart E-mail & Ticketing, and Knowledge Bases accessible through the Help Desk Service Portal.



Smart Service Desk

Easy to use dashboards for reporting, collaboration capabilities, and mobile access, the service desk is at the heart of SMA. A scalable, robust core standardizes incident and problem management processes, and gives IT and its customers a single communication hub. The service desk enables IT to work as a single organization governed by a consistent set of processes. Knowledge management augments the service desk by leveraging knowledge across the organization and by making answers available in real time to both end users and service desk staff. Service-level management makes it possible to define and track service-level agreements (SLAs).



Request Fulfillment

Delivers a fast, easy-to-use IT Service Management (ITSM) process for end users and agents, from demand to fulfillment. It helps define and maintain a standard set of user goods and services, as well as provides self-service access to reduce the service desk's workload. Easy and holistic global search capabilities across the service catalog, support catalog, and knowledge base provide answers quickly. This helps automate the service request process and reduces service desk cost by providing consistent and predictable cost models.

Service Portal

Provides a one-stop shopping with consumer-like experience for PRDE personnel. Users can request goods and services and request support. They can find answers to their problems quickly or open a support request just by sending a screenshot of an error or sending a description using natural language to the helpdesk. Users can browse through the service catalog and send the requests via the native mobile app. Likewise, approvers can approve requests from their mobile devices. The service portal can be easily personalized and changing the logo and themes can be done with just a few clicks.

Machine Learning & Analytics

Leverages structured and non-structured data of ITSM processes and external data sources such as Microsoft SharePoint. It automates incident submission classification and assignment as well as enables proactive problem management. Analytics and machine learning, making it smarter with every user interaction. Natural language search helps to find the right answers in a given context quickly and increases self-sufficiency.

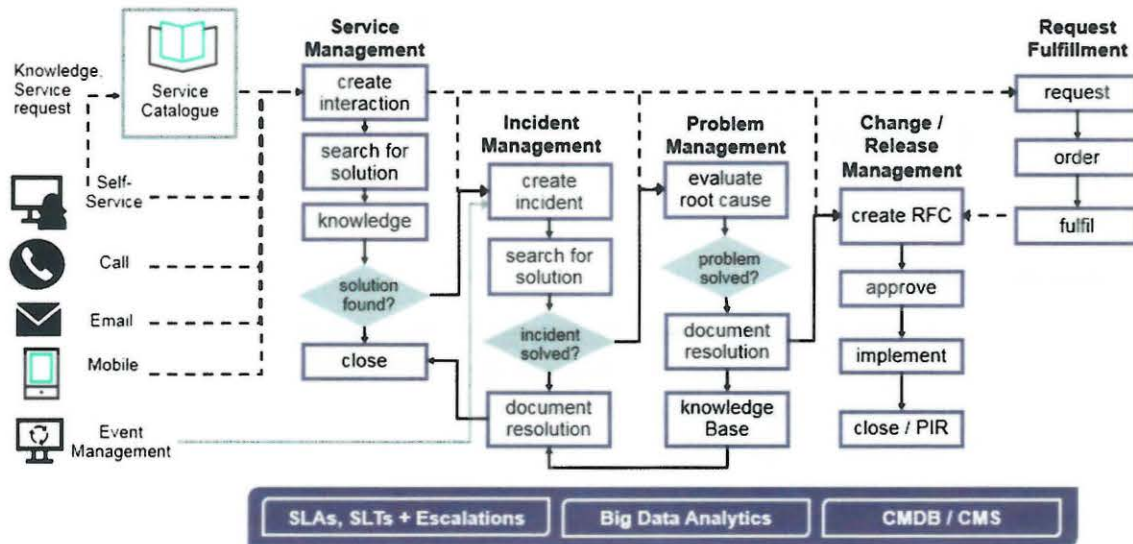
Chat Operations

Conversation-driven collaboration across organizational boundaries to quickly respond to and solve incidents by involving people, processes and tools needed.

Task Automation

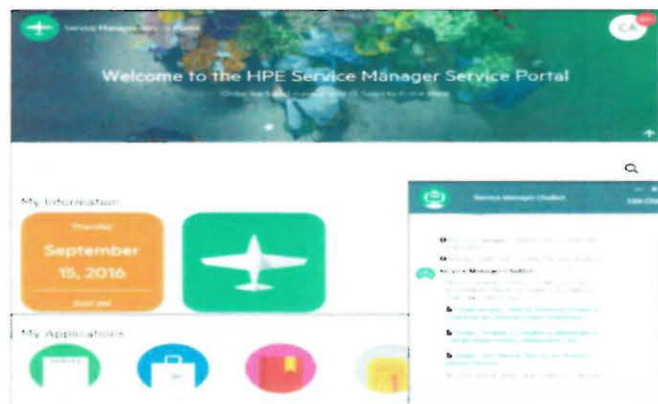
Increases speed, prevents errors, and reduces risk related to manual and repetitive work by automating common or standard tasks. It can help remediate incidents, execute and verify changes, and provision IT services, ranging from simple access requests to comprehensive workflows such as detect-to-correct.

Service Manager processes



Service Portal Overview

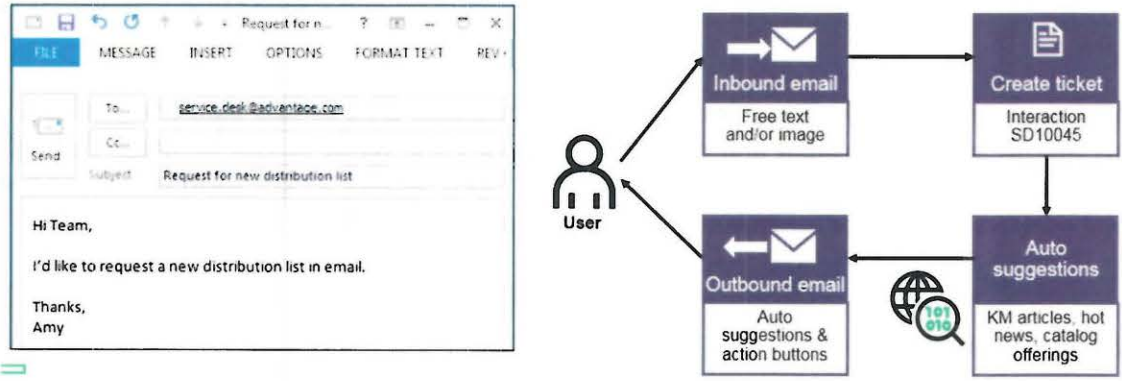
A link to the service portal, together with a remote assistance client can be included on the desktop of every computer image. The portal format and content are fully customizable and can feature PRDE logos and graphics.



The portal contains an incident reporting tool, knowledge base, live and virtual support chats, a survey publisher, a news section, workflow area, and a storefront, all of which can be included and configured to attend any present or future needs.

Smart E-Mail

Smart e-mail is a Service Manager feature that allows users to interact with the Service Manager through electronic mail. This solution can extract the text content from an e-mail and take the necessary actions based on it, including ticket creation through Smart Ticket and replying with suggested solutions based on knowledge base articles and Hot Topic Analytics.



Smart Ticket

An end user will be able to open ticket at times without having to fill out a single data field. A screen capture of the error message included in the incoming e-mail is all that will be needed in these cases to open the ticket and have the Service Manager automatically fill up all necessary fields.

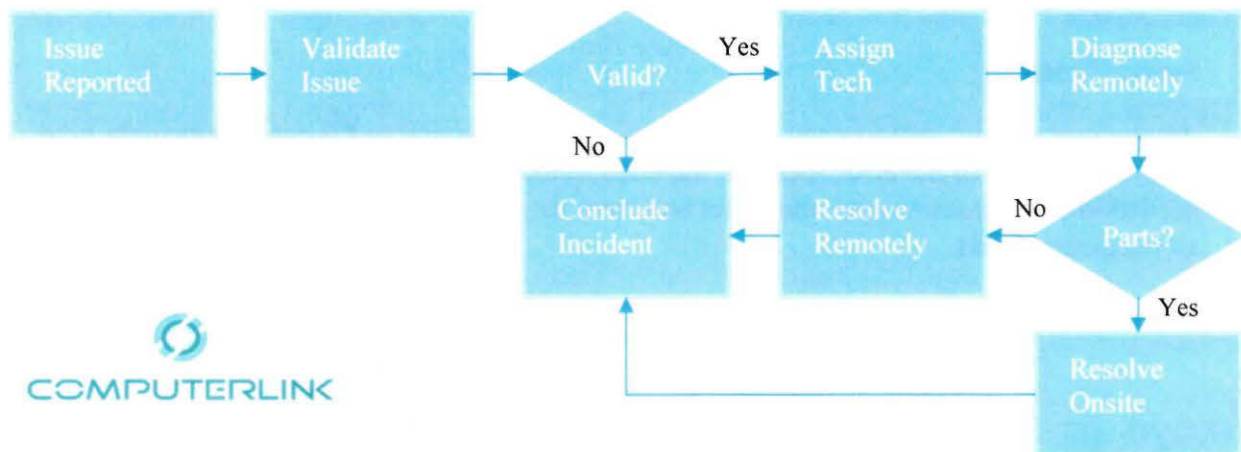


Hot Topic Analytics

With this tool all service issues will be automatically grouped by recurrence, giving administrators a view of patterns and clusters of similar issues so that they can be identified before they affect service availability. This allows information to be evaluated in smaller data groups without having to dedicate the time to analyze all incoming data, allowing the Help Desk to be more proactive when facing potential threats.

All Call Center and Help Desk inquiries will have a response time of less than two business days and this metric will be recorded and reported. Inquiries and requests can be made through the phone, via the Help Desk Portal online through the open service ticket form or the embedded technical support chat option, electronic mail, in person, or through fax.

Service Call Workflow



Incident Visibility & History

Individual help desk end users will have access to view the status and history of all their open and closed cases through the Service Manager Portal. Select PRDE personnel will have access to view the status and case history of every case related to this deployment through the same portal.

Repairs

Computerlink will provide two business day onsite response time during standard business hours (9x5). The onsite response time will be measured from the moment the event is reported to Computerlink and it is determined that the Hardware Break fix event needs to be solved onsite, until the onsite technician arrives to the designated site. The cut off time for the event to be reported and registered is 3:00 p.m. Any call received after that hour, the time will be measured from the following business day.

Coverage window: Service is available nine (9) hours per day between 7:00 a.m. and 4:00 p.m. local time, Monday through Friday, excluding local and federal holidays.

Computerlink will staff a service and repair center with Hewlett Packard certified service technicians in the metro area and will also have several HP certified technicians based around the island. All technicians will be certified by the manufacturer to service the devices deployed in this project. These technicians will be tasked with diagnosing, repairing, and reimaging any of the deployed systems that require it and will have a direct line of communication with the hardware manufacturer for any issues requiring escalation. Technicians will proactively work with the manufacturer to resolve any potential issues uncovered by using Hot Topic Analytics tools included in Computerlink's Service Manager software.

The technician's goal will be to perform a single visit to repair onsite by diagnosing the case remotely or over the phone and showing up with the required part(s) to carry out the repair and incident resolution. If any instance in which the technician must remove the laptop or tablet from the PRDE site or school, a loaner will be made available while the system is being repaired at the service center.

No repair will take longer than ten (10) business days to conclude. The repair time will be measured from the moment the technician receives the device, whether at the PRDE site or when it is dropped off by PRDE personnel at the service & repair center. The repair period will conclude the moment the device is returned to the end user after a repair event.


Fully customizable reports will be generated through Computerlink's Service Manager Automation tool monthly with the status of all open and completed service tickets for the month at the time of the report. These reports will be submitted to the selected PRDE personnel and will detail repairs by school, repair status of service tickets in progress, type of repairs for both open and completed service tickets including response time and time to repair, and support trends, as well as any other relevant data that we have identified or could be requested by the PRDE. Service Manager Reports aims to provide a light-weight reporting feature for active operational data, so the reports are designed to retrieve, represent and visualize at most 100,000 active records out of millions.

2.3.5 Estimated Repairs

All devices include an accidental warranty service for repairs not covered by the standard on-site warranty.

2.4 Carts/Desktop Charging Unit

2.4.1 Carts

2.4.1 Carts	Spectrum Connect 30 Specification
	
Carts must meet the following requirements:	UDT is proposing a customized Spectrum Connect30 Cart to meet the specifications of this RFP.
The cart must house at least 30 devices.	30 Chromebooks, Tablets, or Notebooks
The external construction must be made from welded 12 – 18-gauge solid steel frame	16-gauge side panels, shelves, door, and panel
The shelving must be 20-gauge steel or thicker	Exceeds 20 Gauge requirement - Shelves are constructed of 16 Gauge Steel
Slot size be at least 1.25” or more to accommodate current District issued student laptops and tablets with keyboards	Space saving Vertical Storage Internal Bay Dimensions: 1.349” W x 15.675”D.x 11.2875”H
Dividers must consist of shock absorbing ABS Plastic or Nylon shelf divider system to prevent wear and tear on devices	Durable ABS plastic dividers protect devices from scratching (dividers are removable to provide storage space for thicker devices)
Cart width must not exceed 28” to fit through all classroom doors and cart footprint should be as small as possible to take up less space in the classroom (e.g. 28” x 28”)	Small cart footprint (26” W x 24” D) saves valuable space

<p>Electrical components must be UL listed and cart shall have a switch located on the exterior of the cart to enable switching off of power to the cart if necessary</p>	<p>External power switch provides easy-access for safe power connection / disconnection</p>
<p>Charging components shall deliver a sufficient number of amps per device to allow for charging in the shortest period of time without negatively affecting the electronics of the devices</p>	<p>Comply</p>
<p>Must work with a standard 15 Amp electrical circuit. Smart power management system that prevents circuit tripping and protects devices by charging "round robin" style and is current sensing (able to determine the charging needs of the connected devices).</p>	<p>Power Prodigy Charger Low-profile, 16-gauge steel enclosure• 125V~/12A, 60Hz <ul style="list-style-type: none"> • Externally-accessible 15A on/off switch • Smart charging senses current and distributes power to the power units requiring it most • Four timed power unit-dedicated outlets • Cycling interval 15 min • Four LED lights indicate charging activity status of each power unit • ETL recognized (certified to 60950-1) </p>
<p>Cart must be constructed of steel or similar durable metal that prevents exterior access to the contents without opening doors (no removable panels)</p>	<p>Comply</p>
<p>External LED to indicate charging status</p>	<p>On prodigy charger Four green LED lights indicate charging activity status of each power unit</p>
<p>Cart must have a cable management system to organize power adapters.</p>	<p>Superior, all-metal overhead cord management system keeps charge cords organized above each storage bay</p>
<p>Carts must have lockable doors and must include everything needed to secure equipment, either through a metal hasp and padlock, and/or keyed locking handles; ideally with multi-point security (2 or 3 bolt locking system). If a padlock (keyed or combination) is required, it must be included.</p>	<p>Double bolt keyed locks and heavy gauge steel doors provide security. Hasp locks provide an additional level of security and the ability to use padlocks of choice, or to secure unit to that wall.</p>
<p>The casters must have oversized (4" - 6" diameter and at least 1" width) industrial grade balloon (solid rubber) tires with metal construction swivel castors capable of supporting 250+ lb. each). Non-marring rubber must</p>	<p>Four inboard 5" total locking balloon wheel plate casters with metal construction and non-marring rubber provide easy rolling, and quiet transport (rated for 250 lb. each)</p>


provide easy rolling, quiet transport and be fully lockable.	
Carts must adhere to UL's 10-degree tip threshold.	The FULL cart is UL60950-1 certified for both electrical and tip. Labeling provide on the outside as well internally on each power strip.
Carts must conform to common electrical and general safety standards (e.g. UL 60950, 1678, 1667, 498, etc.)	ETL recognized (certified to UL 60950-1) in the US and Canada for the cart and electrical system
Full access double doors in the front for the user and in the rear for the IT Administrator.	Dual Doors in front and back of cart provide easy access while reducing space necessary for swing radius
Mostly unobstructed top work surface to accommodate peripherals such as printers or other devices.	Scratch and impact-resistant high-pressure laminate top provides a durable, useful work surface for instructors Do not place items weighing more than 50 lb. [22.7 kg] on the top surface
Cart must also provide ventilation vents to ensure devices don't overheat while charging in cart.	Ventilated door and side panels keep devices and chargers cool, preventing overheating, and extending device life

Cart Services

All Carts will be fully wired upon arrival at school site or if replacement is provided under warranty. Carts will be wired as per the DEPR specifications. Carts will be delivered fully assembled to Computerlink and they will deliver to schools per approved schedule from DEPR. Upon arrival at UDT configuration center and before delivery all carts will be inspected for damage.

Computerlink will provide Proof of Delivery (POD) documentation as specified by DEPR to contain the Purchase order number, Date of delivery, Serial numbers, End user location, Signatures of Proposer and site personnel and additional information determined by the DEPR.

Sample POD document shown below:



COMPUTERLINK
We Make Technology Work!

Atlagracia Building, Suite C-2
262 Uruguay Street,
San Juan, PR 00917-2001
Tel: (787) 250-5465 Fax: (787) 250-0306

DATE: Jul 6 2018	PAGE: 1
NUMBER: IN42616	


CONDUCE

DEPARTAMENTO DE EDUCACION
REGION EDUCATIVA DE CAGUAS - AREA FISCAL
APARTADO 206
CAGUAS - PR 00726

ESC. JOSE N. ZANDEKA 23302
315 CALLE DEGETAU SUR
RIBONITO PR AL LADO DE LA GUARDIA NACIONAL
RODRIGO ROSA 1100 Y 730A 150
CONTACTO: JABIE RIVERA 787-378-4505 LUZ RODRIGZ
787-755-7200 LINNESE 215-6421 PROG. CIENCIAS DE LA SALUD


ORDER NO.	ORDER DATE	CUST. NO.	SALESMAN	PO Number	SHIP VIA	TERMS
ORD24804	Jul 6 2018	A023 8	79	00061-0000035610		NET30

QTY	UNIT	BIC	ITEM NO.	DESCRIPTION	UNIT PRICE	UNIT	AMOUNT
2		D	D-03-813	HP OFFICEJET PRO 8710 AIO MFC CNR54BT001 CNR54BT004			
0		C	C-12-171	INFOCUS IN112KV PROJECTOR 1400 LUMENS ISCHR090101028			
0		C	C-12-154	WINFOCUS SORT CASE # CA-SOFTVAL-2 Due Date Aug 05, 2018 Amount Due 1,300.00			



NOTA: PARA EL RECEPTOR DEPARTAMENTO DE EDUCACION
EL RECEPTOR O LA PERSONA ENCARGADA DE RECIBIR, EN PROCESO RECIBIA EL EQUIPO.
Debe firmar el Conduce, completarlo y firmarlo en la hoja de recibos de Educacion, RECEIVE ORDER,
y entregarlo al sistema del Departamento de Educacion. Si la escuela no tiene Receptor,
deberá enviar el Receive Order y el Conduce a la Region para su proceso.

COBREMOS INTERESES A RAZON DEL 1.5% MENSUAL A PARTIR DE LA FECHA DE VENCIMIENTO DE LA FACTURA

RECIBIDO DE CONFORMIDAD POR:  NOMBRE: Juan Luis Rivera 10 julio 18

Conduce

2.5 Mobile Device Location and Utilization Tracking

Absolute is based on the persistence technology providing geolocation of every device. Using multiple technologies Absolute Agents have the ability to determine the location of every device.

The Geolocation Tracking and Geofences features let your organization determine the physical location of a specific computing device, more precisely and immediately, as of the most recent agent call to the Monitoring Center. It is also assumed that the device is properly equipped with a positioning device approved for use with these features.

An Administrator can specify boundaries using the Geofences Editor and track the movement of devices through these locations. Whenever a device crosses a boundary set using the Geofences feature, alerts are triggered and, depending upon the settings specified for the account, result in e-mail notifications to administrators and/or other events on the Absolute console. Geofencing is available to all accounts authorized for the Geolocation Tracking feature. Further, Geofencing is supported for all agent devices) in that account for which Geolocation Tracking data is available.

Geolocation refers to the identification of the most recent geographic location of a device. The Absolute agent can collect the geolocation of a device and report that information in the Absolute console. The geolocation is based on the best geolocation technology available on a device when the device's location is reported.

If the Geolocation Tracking feature is enabled for your account, you can view geolocation information about your devices on the Geolocation page in the Device Management area.

Types of Location Technologies

Geolocation information is collected using one of the following technologies (presented in order of accuracy and reliability):

Location Technology	Description
Global Positioning System (GPS)	<p>Global Positioning System (GPS) technology determines a device's location using built-in sensors to capture satellite signals that indicate the device's location. GPS is most effective when the device is outdoors. This technology works with Windows devices and Android mobile devices that are equipped with a supported GPS receiver.</p> <p>Limitations GPS receivers are designed to receive a signal from satellites reliably when outside with an unobstructed view of the sky. Therefore, GPS receivers are unlikely to work well when surrounded by high-rise buildings or inside metal-framed or concrete buildings. GPS receivers may work inside non-metal framed buildings or near a window.</p>

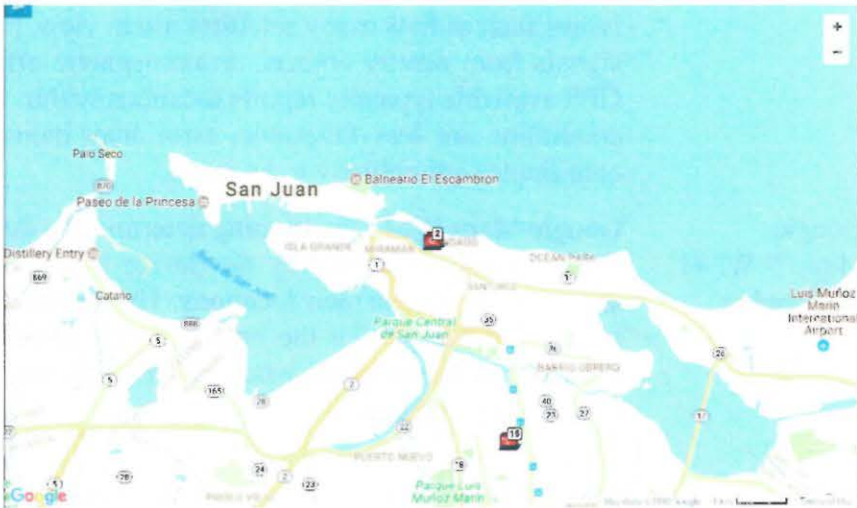
Location Technology	Description
Google Maps™ Wi-Fi Positioning	<p>The accuracy of the location reported by a GPS depends on environmental issues such as how many satellites are in view, potential reflection of satellite signals from nearby objects, or atmospheric effects. In ideal conditions, the GPS available typically reports locations within 10m of actual location. When conditions are less favorable, error may increase to 100m or more. GPS coordinates are unlikely to be exact.</p> <p>Google Maps Wi-Fi Positioning determines a device's location by comparing Wi-Fi hotspots detected by the device with Google's extensive database of known hotspots and their locations. The device does not need to be connected to a Wi-Fi hotspot for the hotspot to be detected. This technology is most effective in urban areas where Wi-Fi hotspots are plentiful. It works with all supported devices.</p> <p>Limitations Wi-Fi triangulation is a correlational tracking method based on the known GPS location of Wi-Fi networks detected near a device. Typically, Wi-Fi triangulation provides a location accurate to within a few city blocks.</p> <p>Also, if a managed device is in a country where Google Maps is prohibited, Google Maps WiFi Positioning cannot be used to resolve the device's location.</p>
IP Georesolution	<p>IP Geo-resolution uses a database of IP addresses and their locations to determine a device's location. This technology is typically accurate at the country level, but device locations within a region or city are less reliable. This technology works with Windows, Mac, Android, and Chromebook devices.</p>

Except for IP Geo-resolution, location data is collected hourly and uploaded to Absolute on the device's next connection to the Monitoring Center. For IP Geo-resolution, locations are collected every time the device makes a connection.

The end users of a device can disable the device's geolocation technology; for example, users can disable GPS or Wi-Fi for all applications. To collect location information, at least one of the supported location technologies needs to be enabled on the device.


Find Devices

- < Classic Reports
- Call History & Loss Control**
- Call History Report
- Missing Devices Report
- Device Drift By Device Name Report
- Device Drift By Username Report
- Activation Report
- Device Location Report
- Device Location History Report



Find Devices

- < Classic Reports
- Call History & Loss Control**
- Call History Report
- Missing Devices Report
- Device Drift By Device Name Report
- Device Drift By Username Report
- Activation Report
- Device Location Report
- Device Location History Report



Plus, the full hardware and software inventory of every device, Absolute measure the Device Utilization of every device.

On the Usage Event Details page, you can see details about the following events that occurred on a device:

- Login and Unlock:
 - A user logged in to the device, either directly or remotely, by entering their username and password on the login screen
 - A user unlocked the device, either directly or remotely, by dismissing the Lock screen (if applicable) and entering their password on the login screen

On this page, these user actions are presented as individual events with time stamps.

- Device Activity: usage of the device presented in days, hours, and minutes of activity.

A Windows or Mac device is deemed to be in use if it unlocked. Activity ceases when the screensaver shows, or the device is locked or shut down. A Chromebook device is deemed to be in use if the display is active (not dimmed). Activity ceases when the display is dimmed, or the device is sleeping, locked, or shut down.

To view device usage information for a Windows, Mac, or Chromebook device:

1. On any page that shows linked Identifiers in the results grid, click the **Identifier** of the device that you want to view.

The following information about the device shows on the work area toolbar:

- Device Name
- Username
- Identifier
- Last Connection
- Average Daily Usage
- Usage Level

2. Click the **Usage Event Details** tab.

The page provides information, in grid format, about each Login and Unlock event on the device. The information is aggregated by date (24 hour period).

The total number of minutes that the device's screen was unlocked during each 24 hour period shows as **minutes of activity** next to the date.

3. Click a date to view the events that occurred on that day. The section expands and the following information shows about each event:

Column	Description
Event Timestamp (Local Device Time)	The date and time (local time on the device) of the user event
Event Type	The type of user event Possible values are Login and Unlock .
BSSID	The MAC address of the WLAN access point associated with the event on a Windows or Mac device This information may not be available for all events. <hr/> NOTE This column applies to Windows and Mac devices only. <hr/>
SSID	The identifier or network name that uniquely identifies the wireless local-area network (WLAN) that the device was connected to when the event occurred This information may not be available for all events. <hr/> NOTE This column applies to Windows and Mac devices only. <hr/>
Local IP	The local Internet Protocol (IPv4) address of the device when the event occurred
Public IP	The public Internet Protocol (IPv4) address of the device when the event occurred
Active Directory OU	The distinguished name of the Active Directory organizational unit that the device was associated with when the event occurred The distinguished name is read from right to left and includes the full path to the object. For example:

Column	Description
	CN=Mary Smith,OU=Employees,OU=Marketing,OU=Miami,OU=Sites,DC=ABC Company,DC=com
	NOTE This column applies to Windows and Mac devices only.

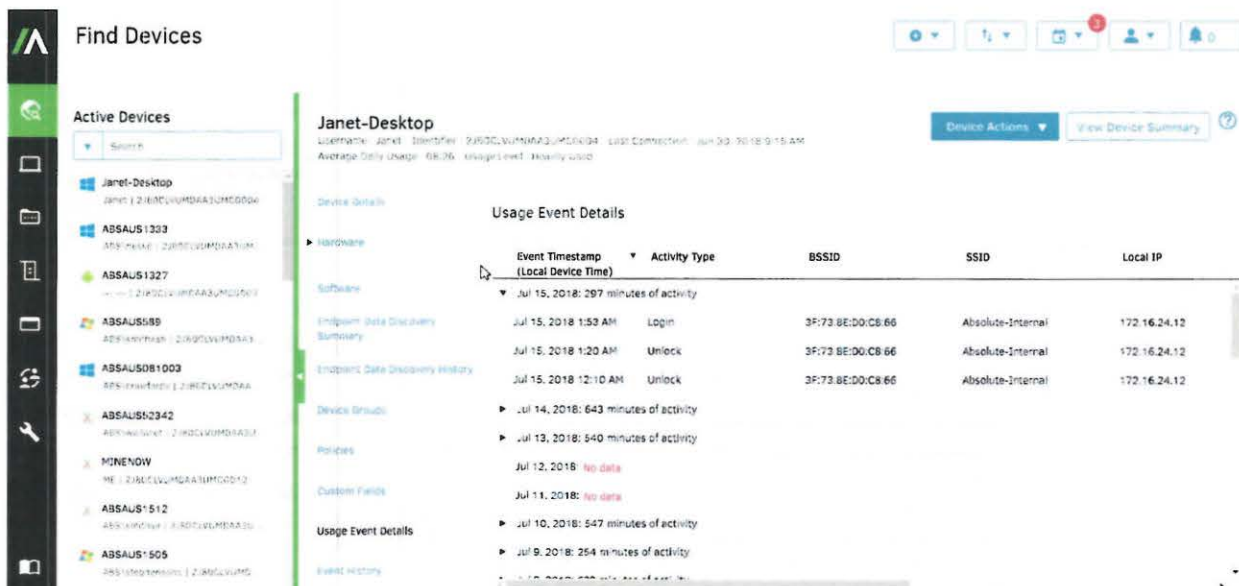
4. The results are sorted by Event Timestamp, in descending order. To sort the results by another column, click the applicable column header. To reverse the sort order, click the column header again. An icon indicates whether the list is sorted in ascending ▲ or descending ▼ order.

5. To view device usage information for another device in the current report, group, or folder:

a) On the sidebar, use the search field to search for the device.

NOTE Depending on how you accessed the Usage Event Details page, the sidebar may show only the current device.

b) Select the device to open its Usage Event Details page.



The screenshot shows the 'Find Devices' interface. On the left is a sidebar with 'Active Devices' and a search field. The main area displays details for 'Janet-Desktop', including its username, identifier, last connection time, and average daily usage. Below this, there are sections for 'Device Details' (Hardware, Software, Endpoints, Device Groups, Policies, Custom Fields) and 'Usage Event Details'. The 'Usage Event Details' section contains a table with the following data:

Event Timestamp (Local Device Time)	Activity Type	BSSID	SSID	Local IP
Jul 15, 2018: 297 minutes of activity				
Jul 15, 2018 1:53 AM	Login	3F:73:BE:DD:C8:66	Absolute-Internal	172.16.24.12
Jul 15, 2018 1:20 AM	Unlock	3F:73:BE:DD:C8:66	Absolute-Internal	172.16.24.12
Jul 15, 2018 12:10 AM	Unlock	3F:73:BE:DD:C8:66	Absolute-Internal	172.16.24.12
Jul 14, 2018: 643 minutes of activity				
Jul 13, 2018: 540 minutes of activity				
Jul 12, 2018	No data			
Jul 11, 2018	No data			
Jul 10, 2018: 547 minutes of activity				
Jul 9, 2018: 254 minutes of activity				



- j. **Device Hand-off and Returns.** It is Computerlink’s goal to service and repair all devices on-site. However, in case that any device needs to be picked-up in need of repair or for any other issue, will only be picked-up by an authorized Computerlink representative with an assigned numbered open ticket. This ticket number can be referenced at any time to follow on the repair status via Computerlink’s Service Manager Portal.

The representative picking-up the device, will bring a Device Pickup Form in duplicate to be signed by the end user. A copy will be left with the end user for future reference. The second copy will be uploaded to the Electronic Service Ticket for permanent record and on-line availability.

A technician or other Computerlink representative will return the device as soon as the repair is completed. A Proof of Delivery document will be presented to the end user to sign for the receipt of the device.

k. **Lemon Devices.** If during the first thirty (30) calendar days following the delivery of the tested device, the device presents three hardware failures of the same or related, it is subject to whole unit replacement. The above is limited to hardware failures with normal use and excludes any claims resulting from the following:

- 1) Improper use, site preparation, or site or environmental conditions or other non-compliance with applicable supporting material.
- 2) Modifications or improper systems maintenance or calibration not performed or authorized by HP or Computerlink.
- 3) Failure or functional limitations of any Non-HP software installed causing damages to HP equipment or 3rd party hardware product impacting service, such as but not limited to 3rd party AC adapters or docking stations.
- 4) Malware (e.g. virus, worm, etc.) not introduced by HP or Computerlink.
- 5) Abuse, negligence, accident, fire or water damage, electrical disturbances, transportation by customer, or other causes beyond HP's or Computerlink's control.

2. **Response and Repair/Replacement Times**

a. **Guaranteed On-Site Initial Response Time.** Computerlink will provide two business day onsite response time during standard business hours (9x5). The onsite response time will be measured from the moment the event is reported to

Computerlink and it is determined that the Hardware Break fix event needs to be solved onsite, until the onsite technician arrives to the designated site. The cut off time for the event to be reported and registered is 3:00 p.m. Any call received after that hour, the time will be measured from the following business day.

Coverage window: Service is available nine (9) hours per day between 7:00 a.m. and 4:00 p.m. local time, Monday through Friday, excluding local and federal holidays.

Computerlink will staff a service and repair center with Hewlett Packard certified service technicians in the metro area and will also have several HP certified technicians based around the island. The manufacturer will certify all technicians to service the devices deployed in this project. These technicians will be tasked with diagnosing, repairing, and reimaging any of the deployed

systems that require it and will have a direct line of communication with the hardware manufacturer for any issues requiring escalation. Technicians will proactively work with the manufacturer to resolve any potential issues uncovered by using Hot Topic Analytics tools included in Computerlink's Service Manager software.

The technician's goal will be to perform a single visit to repair onsite by diagnosing the case remotely or over the phone and showing up with the required part(s) to carry out the repair and incident resolution. If any instance in which the technician must remove the laptop or tablet from the PRDE site or school, a loaner will be made available while the system is being repaired at the service center.

- b. **Guaranteed Repair and Replacement Times.** No repair will take longer than ten (10) business days to conclude. The repair time will be measured from the moment the technician receives the device, whether at the PRDE site or when it is dropped off by PRDE personnel at the service & repair center. The repair period will conclude the moment the device is returned to the end user after a repair event.
- c. **Dedicated Repair and Replacement Team.** HP, the provider of the warranty for the tablets and notebooks, will use their network of service providers in Puerto Rico to provide repair services to the Department of Education. Computerlink, as the premier provider of HP repair services in Puerto Rico, will be heading the repair efforts and with the use of Computerlink's highly sophisticated Help Desk system will monitor compliance with the times committed.
- d. **NOTE:** Neither Computerlink nor HP will be responsible for repaired devices that cannot be delivered or returned to the school because there is no response by the designated personnel at the schools to calls or emails trying to schedule the return of the repaired device. In this situation, the guaranteed repair and replacement times will conclude when the first attempt to contact the school is made.

B. REPORTS

- A. Computerlink's Service Manager and Reporting System is a highly customizable tool that can create any report based on the customer's data. Presently there are several thousand designed reports. Computerlink will design the custom reports required by the Department of Education.
- B. Computerlink's Service Manager and Reporting System is a highly customizable tool that can create any report based on the customer's data. Presently there are several thousand designed reports. Computerlink will design the custom reports required by the Department of Education.
- C. Computerlink's Service Manager and Reporting System is a highly customizable tool that can create any report based on the customer's data. Presently there are several thousand designed reports. Computerlink will design the custom reports required by the Department of Education.
- D. Professional development statistics and findings on training progress and support categories requested by and provided to educators and administrative staff. To ensure adequate training progress, the Data Analyst and PD coordinators will have available data collection mechanisms in place on the PD implementation; including the educators and administrative staff participation. Beyond the usual simple methods of monitoring participation and progress; including activity attendance sign-in sheets, an online database will be created and used for professional development enrollment purposes and to be able to track several indicators. In addition to its usefulness in the coordination and enrollment of the training activities, this online database will greatly assist the PRDOE with the organization and management of future employee training initiatives, and the tracking of completed training activities through a detailed history of all participating teachers and administrative staff in our program. Reports will be generated from the online database, by participant, including: enrollment, attendance, contact hours, classification, progress and evaluations. Also, the online database will store qualitative data, including: a) informal feedback, b) teachers' experiences, c) school transformation testimonials, d) new technologies, apps, strategies

and techniques used in schools; e) best practices observed; and f) case studies' videos.

The surveys and PD activity data to be stored on the online database, will guarantee access to rich information for accountability purposes, in evidencing teacher and staff performance and progress in the integration of technology in curricular and administrative activities. The online database tool will have the capacity to generate reports and graphs by individual participants, but also by groups as requested by LEA's. The training outcomes, as reflected in the reports, and the survey data will not only measure PD performance but will greatly facilitate decision-making for LEA leaders in their future projects and initiatives.

- E. Computerlink's Service Manager and Reporting System has API capabilities and should be compatible with the PRDE ticketing systems. Since the Department's ticketing system is still in the process of being developed and no additional information was available at the time of this proposal, we would have to analyze the PRDE's ticketing system once it is complete to determine if there are any additional costs to ensure collaboration between the two systems.

*** The following are samples of some of the more than 100,000 pre-configured reports that are available within Computerlink's reporting tools

*** Computerlink is willing to partnering with the Department of Education in developing the necessary interface to connect the DE's system to Computerlink's Service Manager and Reporting System.

Incident Management reports

Report name	Report description	Chart type
Open Incidents Assigned to Me - Breached within 3 Days	This report provides the number of all open incidents that are assigned to the user and will be breached within three days.	Number
Incidents Assigned to Me by Priority	This report enables the user to review the number of open incidents that are assigned to the user, sorted by priority.	Pie

Open Incidents Assigned to My Groups by Assignee and Status	This report enables the user to review the number of open incidents that are assigned to the user's groups, sorted by assignee and then by status.	Stacked horizontal bar
Open Incidents without Assignee Assigned to My Groups	This report enables the user to review the number of open incidents without assignee information that are assigned to the user's groups, sorted by priority.	Pie
Top 5 Affected Services with Open Incidents assigned to My Groups	This report enables the user to review the top five affected services that have open incidents assigned to the user's groups.	Vertical bar
Open Incidents Assigned to My Groups - Breached within 3 Days	This report enables the user to review all open incidents that are assigned to the user's groups and will be breached within three days.	Title list
High Priority Incidents Open longer than 7 Days	This report enables the user to review all the high priority incidents that were opened more than seven days ago.	Title list
Incidents Opened within This Half Year by Month	This report enables the user to review all incidents opened in each month within this half of the year.	Line
Incidents Closed within This Half Year by Month	This report enables the user to review all incidents closed in each month within this half of the year.	Line
Incident Backlog	This report provides the number of all incidents that are not resolved yet.	Number
Open incidents Group by category and Area	This report enables the user to review all open incidents, sorted by category and then by area.	Stacked vertical bar
Incidents Distribution on Affected Services - Opened within This Half Year	This report enables the user to review the distribution over the affected services of incidents opened within this half of the year.	Horizontal bar
Closed Incidents meeting SLA Target By Closed Month	This report enables the user to review all the closed incidents that meet SLA target, sorted by their closed month.	Area
Open Incidents Breached Today	This report provides the number of all the open incidents that will be breached today.	Number
Open Incidents Breached Already by Status and Priority	This report enables the user to review the number of all open incidents that have been breached already, sorted by status and then by priority.	Stacked vertical bar
Major Open Incidents by Service and Assignment Group	This report enables the user to review the number of all major open incidents, sorted by the affected services and then by the assignment group.	Horizontal bar

Incident Backlog Analysis by Category and Opened Time	This report enables the user to review incident backlog analysis, sorted by category and then by the opened time.	Pivot Table
Incident Backlog by Priority	This report enables the user to review incident backlog, sorted by priority.	Pie
Closed Incidents Assigned to My Groups	This report enables the user to review the list of closed incidents assigned to the user's groups.	Standard list
Closed Incidents Assigned to My Groups by Priority	This report enables the user to review closed incidents assigned to the user's groups, sorted by priority.	Pie
Closed Incidents Assigned to Me by Priority	This report enables the user to review closed incidents assigned to the user, sorted by priority.	Pie

Change Management reports

Report name	Report description	Chart type
Open Changes Assigned to My Groups by Service and Phase	This report enables the user to review the number of open changes that are assigned to the user's groups, sorted by service and then by phase.	Stacked vertical bar
Open Changes Assigned to Me by Scheduled Implementation Start Date	This report enables the user to review the number of open changes assigned to the user, sorted by the scheduled implementation start date.	Vertical bar
Open Changes Assigned to My Groups without Assignee by Priority	This report enables the user to review the number of open changes assigned to the user's groups without the assignee information, sorted by priority.	Pie
Open Changes Assigned to My Groups by Phase and Priority	This report enables the user to review the number of open changes assigned to the user's groups, sorted by phase and then by priority.	Stacked vertical bar
Changes Closed Today by Me	This report provides the number of changes that are closed today and closed by the user.	Number
Changes Assigned to Me and Opened Today	This report provides the number of changes that are assigned to the user and opened today.	Number
Changes Closed by Month within This Half Year	This report enables the user to review the trend of changes closed in each month within this half of the year.	Line

Changes Opened by Month within This Half Year	This report enables the user to review the trend of changes opened in each month within this half of the year.	Line
Number of Successful Changes by Closed Month	This report enables the user to review the trend of the number of successful changes, sorted by their closed month.	Line
Emergency Changes by Opened Month	This report enables the user to review the trend of emergency changes, sorted by their opened month.	Line
Failed Changes within This Half Year	This report enables the user to review the list of all failed changes within this half of the year.	Title list
Overdue Changes	This report enables the user to review the list of all change requests that have attained an overdue escalation value.	Title list
Changes Open longer than 1 Week	This report provides the number of all change requests that have stayed open for longer than one week.	Number
Closed Changes Analysis	This report enables the user to review the pivot table of closed changes analysis, sorted by the completion code, the affected services, the open date, and the closed date.	Pivot table
Changes Opened within This Half Year by Month and Category	This report enables the user to review the changes opened within this half of the year, sorted by month and then by category.	Stacked vertical bar
Parallel Changes to Involved CIs within the Last 7 Days	This report enables the user to review parallel changes to the involved CIs within the last seven days.	Vertical bar
Open Changes by Assignment Group	This report enables the user to review the number of open changes, sorted by the assignment group.	Pie
Changes Opened within This Half Year by Category and Status	This report enables the user to review the changes opened within this half of the year, sorted by category and then by status.	Stacked vertical bar
Changes Awaiting Approval	This report provides the number of all the changes that are awaiting approval.	Number
Changes Scheduled for This Week	This report provides an overview of changes that are scheduled for this week.	Title list
Critical Open Changes	This report enables the user to review all open change requests that have critical priority.	Title list

Number of Successful Changes by Closed Month	This report enables the user to review the trend of successful changes, sorted by their closed month.	Line
Changes Scheduled for the Next 30 Days	This report provides an overview of changes that are scheduled next 30 days.	Title list
Changes Opened Within This Half Year by Category and Status	This report enables the user to review the number of changes that are opened this half year, sorted by category and then by status.	Stacked vertical bar

Problem Management reports

Report title	Report description	Chart type
Open Problems Assigned to Me by Priority	This report enables the user to review the number of open problems assigned to the user, sorted by priority.	Pie
Open Problems Assigned to My Groups by Assignee	This report enables the user to review the number of open problems assigned to the user's groups, sorted by the assignee.	Pie
Open Problem Tickets Owned by Me by Subcategory	This report enables the user to review the number of open problem tickets owned by the user, sorted by subcategory.	Horizontal bar
Total Count of Open Problem Tickets Owned by Me	This report provides the number of open problem tickets owned by the user.	Number
Open Problems Assigned to My Groups without Assignee	This report enables the user to review the number of open problems assigned to the user's groups without the assignee information.	Number
Open Problems Assigned to My Groups without Assignee by Service	This report enables the user to review the number of open problems assigned to the user's groups without the assignee information, sorted by the affected service.	Horizontal bar
Open Problems by Subcategory	This report enables the user to review the number of open problems, sorted by subcategory.	Vertical bar
Open Problems by Service	This report enables the user to review the number of open problems, sorted by service.	Vertical bar
Problems Open by Month within This Half Year by Priority	This report enables the user to review the trend of problems open in each month within this half of the year, sorted by priority.	Area

Problems Closed by Month Within This Half Year by Priority	This report enables the user to review the trend of problems closed in each month within this half of year, sorted by priority.	Line
Open Problems by Priority	This report enables the user to review the number of open problems, sorted by priority.	Pie
Open Problems by Assignment Groups	This report enables the user to review the number of open problems, sorted by the assignment group.	Vertical bar
Problem Backlog	This report provides the number of all open problems.	Number
Deferred Problems	This report enables the user to review all deferred problems with the problem ID, the title, and the service information.	Title list

Service Desk reports

Report name	Report description	Chart type
All Interactions Pending My Approval	This report provides the total number of all interactions pending on the user's approval.	Number
Open Interactions Assigned to Me by Priority	This report enables the user to review all open interactions assigned to the user, sorted by priority.	Pie
Open Interactions Assigned to Me - Breached within 1 Day	This report enables the user to review all open interactions that are assigned to the user that will be breached within one day.	Title list
Open Interactions Assigned to Me by Category	This report enables the user to review the interaction distribution chart for all open interactions assigned to the user, sorted by category.	Pie
Interaction Backlog	This report provides the number of all open interactions.	Number
Interaction Backlog Analysis by Category and Subcategory	This report enables the user to review the number of all open interactions, sorted by category and then by subcategory.	Stacked vertical bar
Fulfilled and Aborted Interactions Within This Half Year	This report enables the user to review the number of all fulfilled and aborted interactions within this half of the year.	Vertical bar

Open Interactions within This Half Year by Status	This report enables the user to review the number of all interactions open within this half of the year, sorted by status.	Pie
Open Interactions by Priority	This report enables the user to review the number of all open interactions, sorted by priority.	Pie
Breached Interactions by Category and Subcategory	This report enables the user to review the number of all breached interactions, sorted by category and then by subcategory.	Title list
Interactions Breached within 1 Day	This report enables the user to review all interactions that will be breached within one day.	Title list
Interactions Awaiting Approval	This report enables the user to review all interactions that await for approval.	Title list
Open Interactions Assigned to My Groups	This report enables the user to review the list of all open interactions assigned to the user's groups.	Standard list
Closed Interactions Assigned to My Groups	This report enables the user to review the list of all closed interactions assigned to the user's groups.	Standard list
Open Interactions Assigned to My Groups by Priority	This report enables the user to review all open interactions assigned to the user's groups, sorted by priority.	Pie
Closed Interactions Assigned to My Groups by Priority	This report enables the user to review all closed interactions assigned to the user's groups, sorted by priority.	Pie
Closed Interactions by Assignment Group	This report enables the user to review all closed interactions, sorted by the assignment group.	Vertical bar

Request Fulfillment reports

Report name	Report description	Chart type
Requests Awaiting Approval	This report enables the user to review the requests that are waiting for approval.	Number
Open Requests by Phase	This report enables the user to review the number of opened requests, sorted by phase.	Pie

Request Backlog	This report enables the user to review the number of all open requests.	Number
Requests Created by Month within This Half Year	This report enables the user to review the trend of requests created in each month within this half of the year.	Line
Total Cost of Open Requests by Month	This report enables the user to review the trend of the total cost of open requests in each month.	Vertical bar
Unassigned Requests by Priority	This report enables the user to review unassigned requests, sorted by priority.	Pie
Total Cost of Open Requests Last 6 Months per Location	This report enables the user to review the trend of the total cost of open requests in last 6 months, sorted by location.	Vertical bar
Total Cost of Open Requests Last 6 Months per Department	This report enables the user to review the trend of the total cost of open requests in last 6 months, sorted by department.	Vertical bar
Average Cost of a Request	This report enables the user to review the trend of the average cost of a request in each month.	Line
Percentage of Open Requests	This report enables the user to review the percentage of open requests in each month.	Line
Percentage of Closed Requests	This report enables the user to review the percentage of closed requests in each month.	Line

Configuration Item reports

Report Title	Report Description	Report Type
Total Count of CIs	This report enables the user to review all the CIs related to other CIs.	Number
CIs by Location	This report enables the user to review all the CIs, sorted by the location.	Pie
CIs by Service Provider	This report enables the user to review all the CIs, sorted by the service provider.	Pie

Count of CIs related to Services	This report enables the user to review the number of CIs that are related to one or more IT services as a percentage of the total number of registered CIs that can be related to IT services.	Pie
CI Changes within the Last 7 Days	This report enables the user to review CI changes within the last seven days.	Vertical bar
CIs without Owner	This report provides the number of CIs without an owner.	Number
CIs Related to Change	This report enables the user to review all CIs that are currently related to an open change.	Vertical bar
Configuration Item Summary by Type and Status	This report enables the user to view all the configuration items within their organization, sorted by type and then by status.	Vertical bar

Knowledge Management reports

Report Title	Report description	Report type
Number of Articles Awaiting Review	This report enables the user to review the number of the articles that are waiting for review.	Number
Number of Articles Retired	This report enables the user to review the number of the articles that get retired.	Number
Number of Externally Published Documents	This report enables the user to review the number of the externally published documents.	Number
Number of Internally Published Documents	This report enables the user to review the number of the internally published documents.	Number
Number of Articles Created by Month within This Half Year	This report enables the user to review the number of the articles created in each month within this half of the year.	Stacked vertical bar
Document Usage by Article	This report enables the user to review the document usage statistics, sorted by each article.	Horizontal bar
Document Usage	This report enables the user to review the document usage list.	Standard list

License reports

Report title	Report description	Report type
High Water Mark of Module License Usage by Module and by Day	This report enables the user to review the high water mark of module license usage, sorted by module and then by day.	Vertical bar
License Statistics within the Last 3 Days	This report enables the user to review the license statistics within the last three days.	Vertical bar
License Usage Details	This report enables the user to review the license usage details.	Standard list

SLA reports

Report title	Report description	Report type
Response SLO Metrics This Year_Base Monitoring SLA for IT Services	This report enables the user to review the target response metrics for the ten lowest performing Service Level Agreements (SLAs) in the specified month.	Stacked horizontal bar
Availability-Summary_Base Monitoring SLA for IT Aervices_Duration Met %	This report enables the user to review the target response and availability metrics for a single Service Level Agreement (SLA) within a given month.	Vertical bar
Availability-Summary_Base Monitoring SLA for IT Services_Total Outages	This report enables the user to review the target response and availability metrics for a single Service Level Agreement (SLA) within a given month.	Vertical bar
Availability-Summary_Base Monitoring SLA for IT Services_Availability %	This report enables the user to review the target response and availability metrics for a single Service Level Agreement (SLA) within a given month.	Vertical bar

Time duration and calculation reports

Report title	Report description	Report type
Incident In/Out	This report enables the user to review open and closed incidents by quarters in one year. It calculates the numerical difference of the open and closed Incidents in each quarter of the past year.	Line
Average Incident handling time for last year by month	This report enables the user to review the average Incident handling time in each month during the past year.	Line
Average incidents handling time per assignment group	This report enables the user to review the average Incident handling time per assignment group by using the processed time duration data.	Line
Incident handling time per assignment group for breached tickets	This report enables the user to review SLA breaches, which may be caused by OLA breaches. The Incident handling time data in this report is stacked by the assignment group and shows how much time a group is spending on that record.	Stacked Horizontal bar
Total outage duration caused by Incidents per Service this month	This report enables the user to review the total outage duration in hours caused by Incidents, sorted by the affected service during this month.	Horizontal bar
Success change rate by Service	This report enables the user to review the success change rate, sorted by Service.	Vertical bar
Weekly success change rate	This report enables the user to review the weekly success change rate.	Line
Standard change rate this week	This report enables the user to review the standard change rate during this week.	Number
Weekly automated change rate trend	This report enables the user to review the weekly automated change rate trend.	Line
Weekly standard change rate trend	This report enables the user to review the weekly standard change rate trend.	Line

End User Chat reports

Report title	Report description	Report type
All Pending Chats	This report enables the user to review all pending chats.	List
All Accepted Chats	This report enables the user to review all accepted chats.	List
All Closed Chats	This report enables the user to review all closed chats.	List
All Chat First Resolution Rate within Last 30 Days	This report enables the user to review all chat first resolution rate within last thirty days.	Vertical bar
My Average 1st Response Time Within Last 7 Days	This report enables the user to review his/her first response time within last seven days.	Line
My Team Average 1st Response Time Within Last 7 Days	This report enables the user to review the first response time of his/her team within last seven days.	Vertical bar
My Accepted Chat Today	This report enables the user to review the number of chats accepted by him/her today.	Number
My Average Chat Duration within Last 7 Days	This report enables the user to review his/her average chat duration within last seven days.	Line
My Team Average Chat Duration within Last 7 Days	This report enables the user to review the average chat duration of his/her team within last seven days.	Vertical bar
My Team Chat Abandonment Rate within Last 7 Days	This report enables the user to review the chat abandonment rate of his/her team within last seven days.	Line
My Chat Average Resolution Time within Last 7 days	This report enables the user to review his/her average chat resolution time within last seven days.	Vertical bar
My Team Chat Average Resolution Time within Last 7 Days	This report enables the user to review the average chat resolution time of his/her team within last seven days.	Vertical bar

My Team First Resolution Rate of Chat Tickets within Last 30 Days	This report enables the user to review his/her team first resolution rate of chat tickets within last thirty days.	Stacked vertical bar
Percentage of Interactions Initiated from Chat	This report enables the user to review the percentage of Interactions initiated from End Use Chat.	Number
Percentage of Chat Solved by Virtual Agent	This report enables the user to review the percentage of chat solved by Virtual Agents (Sages).	Number

C. MEETINGS, NOTIFICATIONS AND SUPPORT

1. The Department of Educations' appointed personnel will have on-line access to Computerlink's highly sophisticated Help Desk via internet connection and will be able to check on the status of repairs, notifications and scheduled meetings.
2. HP, the provider of the warranty for the tablets and notebooks, will use their network of service providers in Puerto Rico to provide repair services to the Department of Education. Computerlink, as the premier provider of HP repair services in Puerto Rico, will be heading the repair efforts and with the use of Computerlink's highly sophisticated Help Desk system will monitor compliance with the times committed. Both the Help Desk personnel and the technicians repairing equipment will be under Computerlink's Technical Services Department which is headed by Daniel Morales, Vice President. 787-250-5465 ext. 314 and 787-599-7511; dan.morales@computerlink.cc
3. Computerlink will conduct quarterly status meetings with the Department of Education, Computerlink decision makers and technical personnel, HP personnel and relevant subcontractors. However, special meetings will be held at any time that a situation so warrants. Also, during the deployment phase, other scheduled meetings will be held to discuss status of deliveries and any issues that come up.
4. Proof of delivery documents will be uploaded into Computerlink's Service Manager automation tool. This tool will be available to the Department of Education to access in real time.

2. LIQUIDATED DAMAGES

Liquidated damages, if any, to be paid to the Department of Education, are subject to negotiation with the Department of Education after Computerlink is selected as a supplier of the devices under the RFP before signing a contract.

3. RETAINAGE

Retainage, if any, to be held by the Department of Education, is subject to negotiation with the Department of Education after Computerlink is selected as a supplier of the devices under the RFP before signing a contract.

