

# CPS-WebCT Integrated Feature

From eInstruction Corporation

Looking for a way to integrate classroom performance and WebCT? eInstruction's CPS-WebCT Proxy Tool may be the answer you're looking for. This CPS-WebCT integrated feature uses software from WebCT with the Classroom Performance System (CPS) from eInstruction, the world leader in interactive classroom instructional tools.

Instructors will finally be able to use the best of both worlds—instructors can engage their students in a lesson and record student responses then upload the information to WebCT for students and instructors to review online. Your student data will remain safe: eInstruction uses only secure servers for transfer of data between WebCT and CPS.

## Connect the classroom to home...

The CPS-WebCT integrated feature allows instructors to more effectively engage their students both in the classroom, using CPS, and at home, when students use WebCT. The CPS-WebCT Proxy Tool is easy to install, and our Technical Sales Support team is ready to assist you in any way we can. In addition, CPS's user-friendly interface allows instructors to quickly and easily use the link. Using CPS, instructors will be able to view the following on WebCT:

- **Individual performance results.** CPS records performance data for each student in class. Individual student data can be accessed by the student via WebCT.
- **Attendance.** Instructors can keep attendance records, and even distribute bonus points to students who regularly attend class. Students will be able to track their attendance progress through WebCT.
- **Gradebook.** Instructors can upload assessment data captured using CPS to the WebCT grade book

## Use your existing software...

The CPS-WebCT integrated feature requires very little additional software. The following components are necessary for you to use the CPS-WebCT integrated feature.

**WebCT Vista.** This tool is compatible with WebCT Vista versions 3 and 4, and also with WebCT Campus Edition 6. Because this tool works with your instructors' existing WebCT software, the instructors will not need to learn a new program.

**WebCT Proxy Tool 3.14.** eInstruction will provide you with the latest proxy tool version, 3.14.

You will also have a Technical Sales Support team ready to assist you Monday through Friday, from 7:00 AM to 6:00 PM (CST). You can reach Technical Sales Support by calling 888.333.4988 or by sending an email to [techsupp@einstruction.com](mailto:techsupp@einstruction.com).

### CPS-WebCT Integrated Feature Requirements

- **WebCT Vista**  
The integrated feature supports WebCT Vista versions 3 and higher. The feature is also compatible with WebCT Campus Edition 6.
- **WebCT Proxy Tool**  
eInstruction will provide you with the latest version, WebCT Proxy Tool 3.14.
- **Classroom Performance System (CPS)**  
The feature works with CPS for PC version 3.63 and higher, and with CPS for Mac version 1.3 or higher.

**Classroom Performance System (CPS).** CPS is an interactive software created by eInstruction Corporation that allows instructors to engage their students in the classroom and record student responses, which can later be analyzed by the instructor. Instructors can use CPS with either a PC or a Mac.

- **PC Users**

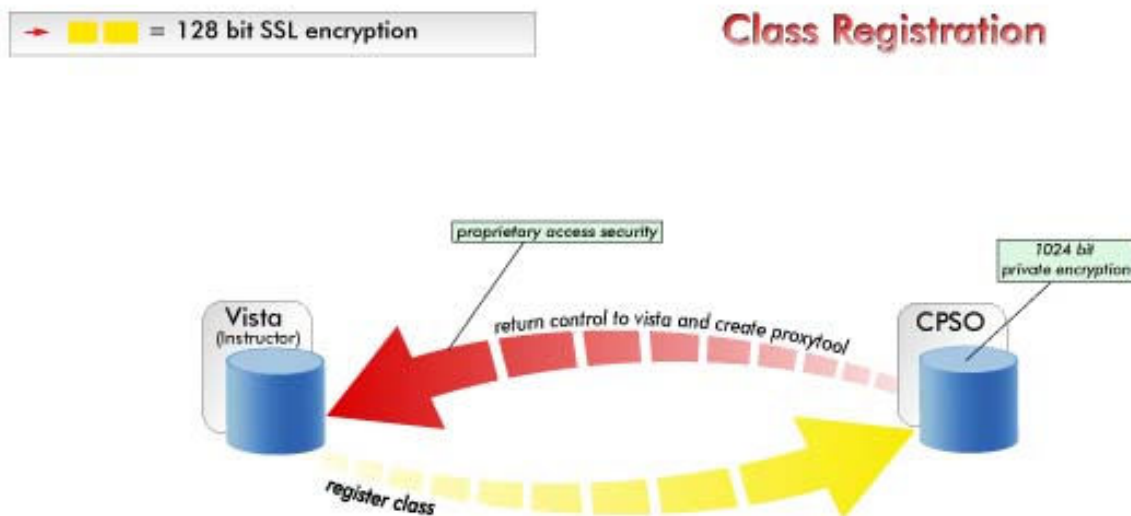
Your instructors will need to have CPS 3.63 or higher installed on their computers. They can download the latest version, CPS 4.0, for free from our website, [www.einstruction.com/downloads](http://www.einstruction.com/downloads).

- **Mac Users**

Your instructors will need CPS 1.3 for Mac or higher installed on their computers. They can download the latest version, CPS 1.32 for Mac for free from our website, [www.einstruction.com/downloads](http://www.einstruction.com/downloads).

## Create a secure link...


The CPS-WebCT Proxy Tool creates a link between CPS and WebCT using WebCT's PowerLinks feature and CPS's online component, CPSOnline.



**Figure 1. Connection between WebCT Vista and CPSOnline during Class Registration.**

Class registration is simple when using the proxy tool. Once you have the CPS-WebCT Proxy Tool enabled through WebCT's PowerLink, you can customize the settings for specific colleges, departments, or instructors.

Instructors log on to WebCT and enable the CPS-WebCT link using the proxy tool button (once you've set this up). See the IT Administrator's Guide for the CPS-WebCT Proxy Tool on how to set this up in your version of WebCT

- No student grade data stored within CPSO
- No credit card info stored in CPSO
-  = 128 bit SSL encryption

## Student Registration

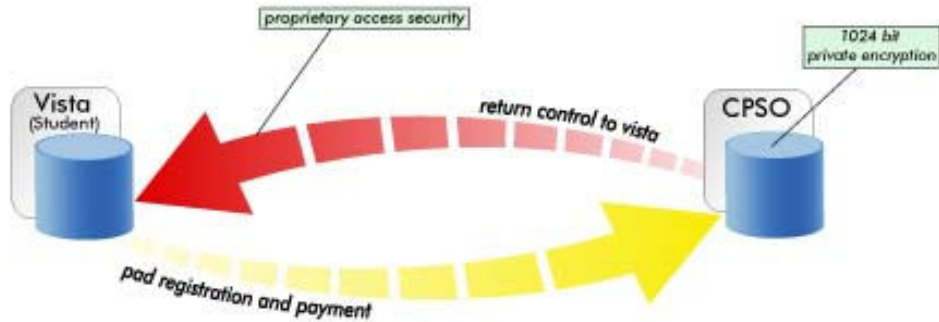


Figure 2. WebCT and CPSOnline interaction during Student Registration.

Students can register for their class through the WebCT portal. When the instructor registers the class, the link between CPSOnline and WebCT becomes active. As students register for their class on WebCT, WebCT retains the student information in a class roster.

-  = 128 bit SSL encryption

## Sync Process

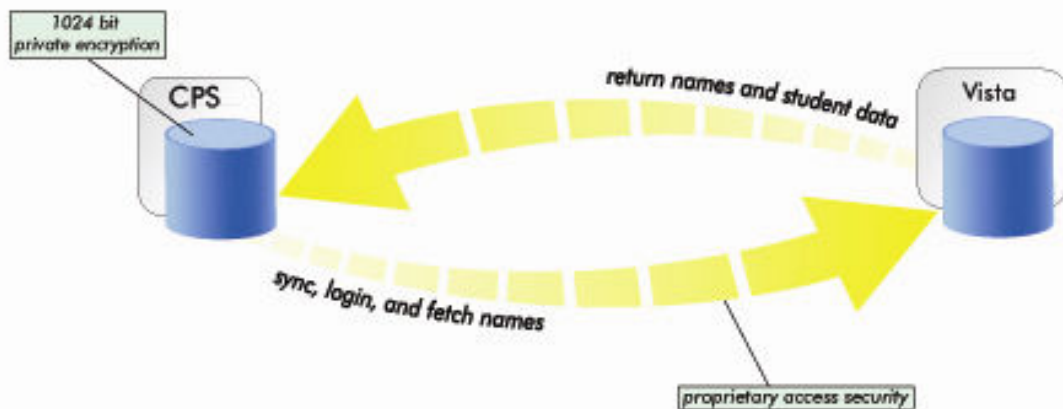


Figure 3. Data path from CPS to WebCT Vista.

When instructors use CPS, they can choose to connect to their class online. After the instructor logs in, CPS communicates with WebCT and extracts the class roster. The entire class roster, including student names and response pad ID numbers, will be available in CPS. As new students register for the class, the CPSOnline-WebCT Proxy Tool will continue to update the class roster as the instructor logs in. None of the student information will be maintained in CPSOnline.

## Protect student data...

The connection between CPS and CPSONline, and the connection between CPSONline and WebCT are secure. The CPS-WebCT Proxy Tool uses port 80 (open by default) and a secure port, port 443, to bridge the connection.

### **CPS – CPSONline Connection**

CPS and CPSONline use SSL encryption, used by banks and financial institutions worldwide, to ensure that all data is transmitted securely. The CPS-CPSONline connection uses public key cryptography encryption with a 128 bit public key and transmission and a 1024 bit private key on the server(s).

Once the information is passed to CPSONline, the information remains secure. Our site offers complete redundancy in power, HVAC, fire suppression, network connectivity, security, drive arrays, web servers and database servers. We have multiple power grids driven by TXU electric, multiple Liebert and PowerWare UPS battery backup power, and onsite permanent generator power. Our HVAC systems are a combination of glycol, chilled water, and condenser units by Liebert and Data Aire to provide redundancy in cooling coupled with 6 managed backbone providers.

Twelve third party backbone providers are available via cross connect. Fire suppression includes a pre-action dry pipe system including VESDA (very early smoke detection apparatus) along with over 600 smoke detectors. Onsite security is also a concern so we utilize key card access with CCTV for maximum security. All visitors must check in and out of the facility. The goal is to provide maximum redundancy in every facet of the datacenter environment to facilitate 100% uptime for your school's data.

As far as data security, we have built in security from the start. The students' data is never on any server that is accessible on the web. Our databases are accessible only via database specific NIC cards utilizing non-routable IP addresses.

Our sites use a combination of hardware firewall solutions as well as multiple network separations. All security appliances feature very low latency, high throughput IPsec encryption.

When the information passes from CPSONline to WebCT Vista, the only student information that is retained in CPSONline is an encrypted ID key for each student. *No student performance data, ID information, or grades will be maintained in CPSONline.*

### **Credit Card Purchasing**

When students register for their class in WebCT, and pay for their class access, all credit card information is also kept secure. VeriSign provides the merchant account processing for all credit card transactions, as well as SSL certificates for the website. In addition, eInstruction is CISP-certified by Visa and MasterCard.

### **Security Information**

**Class Registration.** 128 bit SSL encryption connection between CPS and CPSONline, with a 1024 bit private key for data while it is located within CPSONline.

**Student Registration.** Proprietary access security and a 128 bit encryption connection between CPSONline and WebCT Vista.

**Sync Process.** 128 bit encryption connection as data flows from CPS to CPSONline to WebCT and back again. Data is protected by a 1024 bit private encryption key while moving through CPSONline and protected by proprietary access security as it enters WebCT.

*No student credit card numbers, card expiration dates, or student contact information will be stored in CPSONline.*

eInstruction works with each institution to create the solution that best fits their needs. Some institutions choose to purchase CPSONline class access for their students.

We can also work with you while you install the Proxy Tool to customize settings, such as including student names with uploaded registration information. Your eInstruction representative or the Technical Sales Support team can work with you to create the connection you need.

### Upload student data...

When instructors open CPS, they can choose to log in to their CPSONline class. The logon simply opens the connection between CPS and WebCT, allowing instructors to upload student performance data.



Figure 4. Data flow from CPS to WebCT Vista directly after ending a session.

The CPS session upload, which can be done automatically after an assessment or at any other time through the CPS **Reports** tab, is sent to WebCT Vista via a 128 bit SSL encrypted communication.

When instructors choose not to upload their session data immediately after a session, or are not connected to the internet while they are teaching, they can always upload data at a later date, using the CPS **Reports** tab.

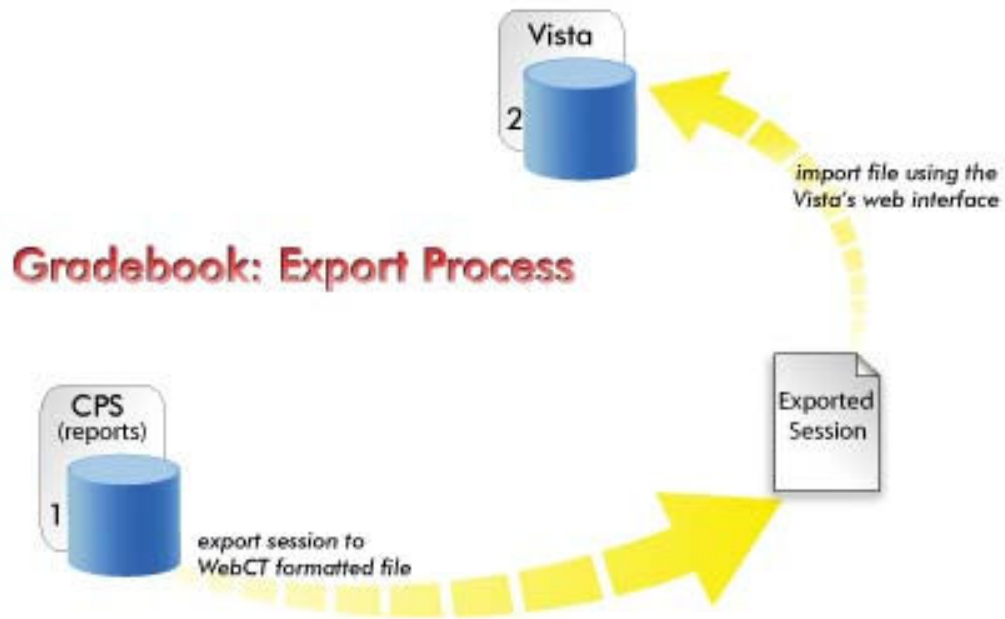


Figure 5. Data flow from exported WebCT Report file.

The instructor opens the *Reports* tab in CPS. The instructor then completes the following steps to export the session and upload it to WebCT:

1. Select the session you would like to export.
2. Click the **Generate** icon from the *Reports* tab. The CPS Reporting window appears.
3. Choose **WebCT Export** (last report type) from the list of available reports.
4. Click **Preview**. Your session will be exported to Microsoft Excel or to your default spreadsheet program.
5. Save the WebCT Export report to your computer.
6. Log on to WebCT.
7. Open your class to the Grade Book view.
8. Click the **Import from Spreadsheet** button.
9. Use the **Browse** button to browse through your computer to find your WebCT Export report.
10. Click **Upload** to upload the file.