Integrating TimeControl with Deltek's Open Plan and Cobra

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The Deltek Enterprise Project Management products include both a powerful scheduling and resource management system within Open Plan™ and a powerful Earned Value Management System for costs within Cobra™. HMS Software has a long history with both of these products.

Over the next few pages, we will be outlining the value-added of integrating TimeControl with Deltek's Open Plan and Cobra.

TimeControl is an enterprise timesheet system published by HMS Software which is designed to integrate with both scheduling systems such as Open Plan or Microsoft Project, Costing systems such as Cobra and corporate financial and control systems including most ERPs such as SAP, PeopleSoft, Oracle Financials and, Baan. TimeControl was first released in 1994.

HMS Software was formed in 1984 as a consulting firm specializing in the automation of project management environments. It was the Canadian distributor for Open Plan and Cobra from 1985 through 2001 and is a Deltek ISV Alliance Partner.

There already exists a timesheet interface within the Deltek product line. The Time and Expense module within Dektek's CostPoint is a financial timesheet ideally suited for project organizations who require a link to Cobra only rather than Cobra and Open Plan

This paper will be of specific interest to organizations that have an interest in using project-based timesheet data for updating the project management system within Open Plan and then using the same data for financial purposes.

No, not all timesheets are created equal. There are many types of timesheets on the market today which fit into several categories of timesheets, each with their own purpose. We've outlined some of the most common categories here.

Time and Attendance

Time and Attendance timesheets are the most common types of timesheets on the market. They are typically delivered as part of the corporate human resources (HR) system or the corporate financial or ERP system. Time and Attendance systems focus primarily on how much time you have spent working for the organization during a particular period and whether or not you should be paid for this time. Often, these systems are intimately linked with the organization's payroll or Human Resources system. They usually allow for the entry of whether or not an employee worked, whether special pay is required for example for overtime, exception days such as holidays, vacation or, sick leave.

Time and Attendance timesheets are divided into two types of entry: Positive-Entry or By-Exception. A Positive-Entry system requires each employee to complete his or her timesheet for a given period. A By-Exception-entry system requires a timesheet only for recording absences with the reason for the absence.

Time and Billing

Time and Billing systems are the next most common type of timesheet to be found in an organization. These systems are designed for professionals such as lawyers, accountants and consultants. The basic purpose of a time and billing system is to qualify any billable hours per client. The key element of each detail item is the client identifier. Most time and billing systems allow for a descriptive element. This is to ensure that there is enough information to justify an invoice for each period. Terms such as "project" and "task" are common in such systems but they are usually best thought of as qualifiers for an invoice rather than a pre-determined set of tasks each with a schedule, budget and scope.

Time and Billing systems are often driven by per-client rates rather than per-employee, or per-project rate schemes.

Manufacturing time and motion

Time and motion studies date back to the earliest days of the assembly line. Time and motion studies were developed out of a desire to increase the throughput of work through a particular manufacturing process. Timesheet systems based in the manufacturing world are often driven by hardware such as laser bar-code scanners, magnetic card readers or other mechanical devices. In such a system, an employee on the shop floor might swipe their employee magnetic card across a reader when arriving at a workstation to begin work on a large unmovable module (e.g. an aircraft plane engine). Once they had completed work on this task, they would swipe their card again to indicate the work was complete. Hours in assembly would be tabulated and allow Finance to determine a true total cost of assembly. Manufacturing Resource Planning (MRP) systems often include such functionality. What is usually missing from these paradigms is linking the data back to a project management system

where a plan for the work was established. The link between project systems and manufacturing systems is a subject that warrants a white paper of its own and won't be discussed in any detail here but it is sufficient to say that mixing these two paradigms requires an involved process.

Project-update timesheets

These days, almost every project scheduling system includes some kind of timesheet entry. These interfaces are designed to allow end-users to enter time against any activity. The data, once entered, is used to update the activity's resource progress. There is often some level of project-manager approval commonly referred to as line-item approval.

For many project management environments, this type of timesheet is all that is required. However, these timesheets and the architecture used to produce them are rarely sufficient for financial purposes. It would be unfair to characterize this as a deficiency of these systems. The first thing to remember is that most project management systems are, by their very nature, forward-looking analytical tools. For a planner, the actual-hours per task is only interesting to the degree it reveals the future. A planner, for example, might elect to delete a task from a project. Perhaps future plans have changed and no additional work will be done on that task. Or, perhaps the task will be replaced by two or three other tasks which have been now defined in more detail. No problem for the planner, they are only interested in what will happen in the future. For anyone interested in historical data, however, there may be more of a problem. In many project-update systems, the loss or change of an activity means the automatic removal of any data linked to that task. Even if data is not deleted, the financial controls such as post-period adjustments, financial approvals, and business rules compliance are rarely managed within such systems. Even simple functions such as determining if all timesheets have been entered are often not supported in such a system.

This makes project-update timesheets best suited when only the project data must be updated.

Enterprise timesheet systems

For some organizations, there is an interest in collecting time for both financial and project purposes. For this market there are a small number of timesheet systems designed to fill multiple purposes. TimeControl is such a system.

These timesheet systems are usually based on a project model, allowing data to be collected at the task level with an intent that the data will ultimately be returned to the project system as task progress. However, these systems also include the financial controls which allow their data to be accepted by the finance department and the facility to be integrated directly into the financial system. Enterprise-wide timesheets can be implemented for individual departments, for small to medium sized business or in a large-scale organization. These timesheet systems are appropriate for project-oriented businesses where there is a need to determine not only how much time has been spent but what that time was spent on.

Because these enterprise systems include both the ability to link to a project-management system such as Deltek's EPM suite and the financial controls which allows the Finance system to accept their data, they can be used to fulfill the needs of time and attendance, time and billing and project-update requirements at the same time.

Summary

For organizations that only require tracking the total quantity of time spent, and an indication of why any absences occurred, time and attendance systems are the most appropriate. They will already be integrated into the ERP, HR and/or Finance systems and will be a natural extension of that functionality to all users.

For organizations that must capture time in order to update both the project management system and a financial, HR or ERP system, then an enterprise timesheet system such as TimeControl may be most appropriate. TimeControl links directly to the Deltek EPM systems and can be presented in its own web-based interface or within Microsoft's SharePoint.

TimeControl is HMS Software's enterprise timesheet system and is designed to integrate with both the project management functionality of products such as Open Plan and Cobra and with financial systems such as SAP, Oracle Financials and Baan. TimeControl provides a multi-purpose timesheet that allows data to be entered one time in a single place and then used for multiple purposes.
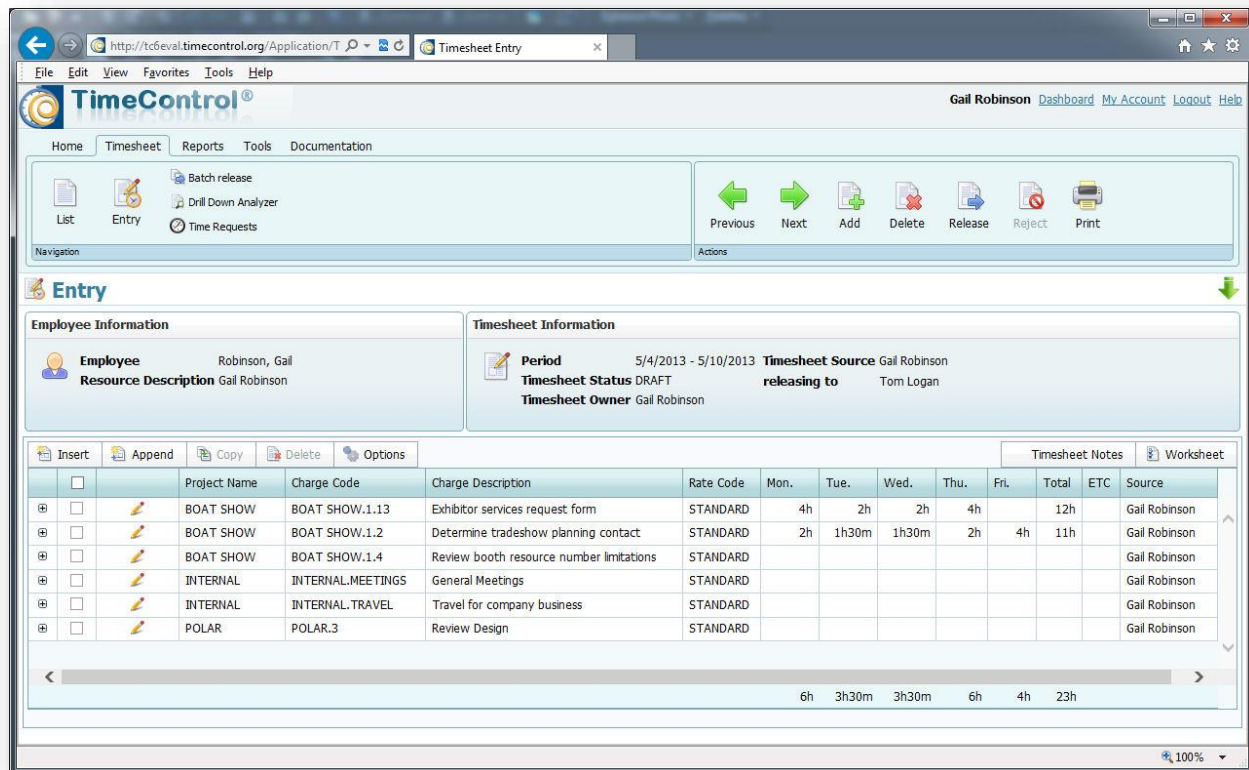
HMS Software created TimeControl after over 10 years of providing customized timesheet solutions to the project management departments of numerous mid-to-large-sized firms. TimeControl was launched as a commercial software application in 1994. TimeControl is designed as a financial tool with all the controls that finance managers typically require in order to use the timesheet data for auditable purposes such as payroll, project billing, job costing, R&D tax credits, Sarbanes-Oxley or DCAA compliance and more.

TimeControl is ideally suited for those situations where timesheet data will be used for both project and financial purposes. In this scenario, the project managers require a system which will return actual hours task-by-task to the project systems or at a minimum, in project reports and finance managers require data to be integrated into the finance systems such as payroll, HR, job costing and/or billing.

TimeControl is a project-oriented timesheet system and because of its multiple-role nature, is very flexible. An unlimited number of user-defined fields can be added to the project, charge,

employee and rate tables, allowing the data to be grouped, summarized or sub-divided in an infinite number of ways.

This allows data to be sent back to project management tools such as Open Plan at the task level yet group the same data into Work Packages for Cobra, summarize the data by work center for job costing and at the department level for reporting and summarize the same data to an accounting code level for integration with an ERP system.

Because TimeControl is designed around its own data structure, it can be linked to multiple project environments simultaneously. Users could, for example, enter a single timesheet that would simultaneously include data linked to some projects stored in Open Plan on the server, Open Plan individual files, and even Microsoft Project for some and yet others tracked in TimeControl alone.

TimeControl includes a complete web-based interface and has a very secure architecture.

TimeControl's Link module allows end-users to integrate with their own financial systems including ERP systems such as SAP, Oracle Financials, or Baan. Links can also be defined for other legacy systems such as home-grown HR systems and internal or external payroll services.

TimeControl's architecture supports several database formats including Microsoft SQL Server, Oracle and Sybase.

TimeControl timesheets are tracked to allow missing timesheets or timesheets which may be stuck in the approval process to be instantly located and approved by supervisors if necessary. A scheduled email notification can be sent to users whose timesheets are still missing.

TimeControl's extensive rate structure allows multiple rates to be tracked for any employee. Thousands of individual rates per employee are supported and for each rate, two costs are tracked. Typically these are used for internal or actual cost vs. external or billing costs.

TimeControl's automated *Validation Rules* allows business rules to be created. It defines what makes an acceptable timesheet prior to its release for approval. Validation rules can be specific to one group of users or to all users and there is no limit to the number of rules that can be defined.

TimeControl also supports a matrix approval process that allows both resource managers and project managers to approve timesheet data.

If an organization requires data to not only update the Project Management's task progress but also to use the same data for financial purposes such as payroll, job costing or human resources, then it should consider TimeControl.

Linking to Open Plan

TimeControl includes a direct link to Open Plan. Dating back to 1994, it was the first link ever

created in TimeControl as HMS was a distributor for Open Plan for over 15 years. The link is defined in the Project Table and the Interface Definition. You can update task information TimeControl from activities in Open Plan, update project information from the project information in Open Plan as well as code information from user defined fields, resource information from the resource list and

assignment information from each task. In sending information back to Open Plan, you can send back hours, actual labor costs, expense costs and, task and assignment ETC.
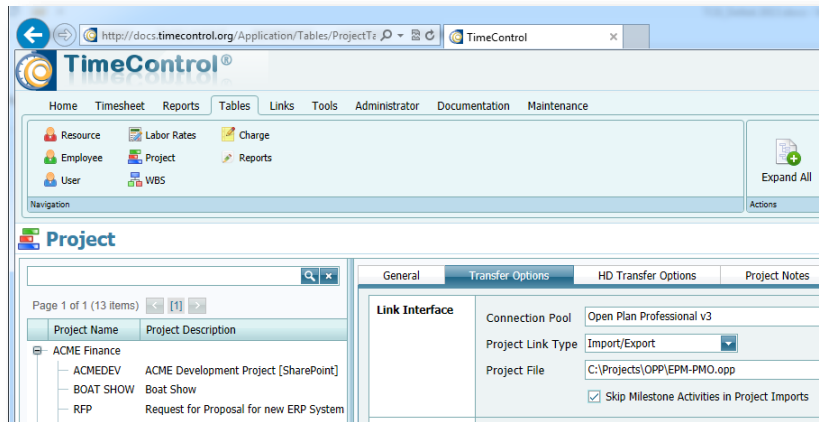
Auditable timesheet data

TimeControl's timesheet data is stored in its own database and is managed in such a way that it is completely auditable. Once stored, timesheet data is locked just as financial data would be when a period is posted. Adjustments to the data are done just like a financial system through a "Debit/Credit" function and the user who enters any data is tracked at a line-by-line level.

Once TimeControl data is entered, it is stored. Even deleted items are stored in historical tables in order to maintain referential integrity. It is a basic tenet of the TimeControl environment that timesheet data must be able to be displayed exactly as it was originally entered by the end-user. Any adjustments to that data must also be able to be displayed with the identification and time of who and when that data was adjusted.

These controls are basic design requirements for any finance system and given that TimeControl's structure follows these requirements the system's data can now be used for multiple purposes.

In this age of accountability it is key that actual cost data be of the highest quality possible. Project managers are often given control over huge amounts of money and the ability of that project manager to identify how that money was spent and know that the Deltek EPM cost data will match the data collected by finance without discrepancy.

Using TimeControl ensures that timesheet and labor cost data is completely traceable to its source and that if need be, the data can be presented in its original format for auditing purposes.

Use TimeControl for Finance as well as project management

Given the auditable nature of TimeControl data, one of the most important values added by integrating TimeControl with Open Plan is that the same source data can feed both Project and the Finance system. TimeControl data is often used for payroll and/or HR purposes and has been integrated with a wide variety of finance systems including all the major ERP systems such as SAP, PeopleSoft and Oracle Financials.

When the same source data is used to feed both Finance and Open Plan, redundant systems can be eliminated. In some organizations, multiple timesheet systems must be maintained in order to fulfill the requirements of both aspects of the organization. Eliminating multiple timesheet systems not only eliminates the possibility of some people double-entering their timesheet data but, more importantly, eliminates the likely possibility that these systems will not show the same amounts for costs. With disparate systems, the chances of double entry of timesheets in systems designed for different purposes adding up to the same amount is exactly zero.

Trying to reconcile the costs from different systems such as an ERP timesheet and a status timesheet is almost impossible and can result in tremendous effort being spent on an exercise, which brings little satisfaction.

If timesheet data must be used for both updating Open Plan and for financial purposes, it is highly desirable to have that data come from the same source. TimeControl was designed to serve this situation.

Track costs with multiple actual rates

In most project management systems including Open Plan, a limited number of rates per resource are supported. As flexible as Open Plan is, it is primarily a project scheduling system and as such, the rate functionality is focused on projected costs rather than historical actual costs.

When we look at actual costs collected through a financial timesheet system, we must be able to identify costs as they will be paid in a payroll system and billed in our actual billing system. Multiple rates in a financial timesheet are the norm rather than the exception.

TimeControl supports thousands of rates per employee and each rate code supports two values. These values are most often used to track internal or actual costs and external or billing cost. This structure allows for tremendous flexibility in defining actual rate costs. Some examples of how this flexibility can be used include:

- Creating rates for internal vs. external work
- Creating a virtually infinite variety of overtime conditions
- Creating multiple billing rates with a single internal cost.
- Creating rates to track flex or banked time

Reduce redundant timesheet systems

With TimeControl's ability to serve both Open Plan as a source of activity progress and the finance system for payroll or other financial purposes, redundant timesheets can be eliminated. Many organizations end up with multiple timesheet systems each designed to serve a different

purpose. Eliminating multiple timesheets, when possible, can save enormous costs in technical support, in administration, in end-user effort to enter multiple timesheet and, most significantly, in the costs of reconciling the data from disparate timesheet systems.

Ensure that all timesheets are entered

A fundamental function in an HR-based timesheet is the ability to determine that all timesheets have been entered and approved and that there are no outstanding or missing timesheets. This type of functionality is very uncommon in a project-updating timesheet. The ability to determine that all data has been entered means that project managers know that when they transfer data back to Open Plan or into Cobra that they are looking at 100% of the actual hours. Also, implementing a process that ensures that all timesheets are entered each week ensures that project hours are never forgotten or lost. Since this is a fundamental requirement of a financial timesheet system, TimeControl includes this functionality and its benefits then become available by extension to the Open Plan or Cobra environments.

Matrix organization approvals

One of the primary issues with implementing a timesheet to serve both project management and finance is with approvals. In this kind of environment, there are a number of people who will want to approve the timesheet data. The resource or line manager will need to see the timesheet in its entirety so they can see the employee's week in context. If there is overtime to approve or sick leave or vacation time, the entire timesheet must be seen together. A resource manager will be less concerned with what the employee did with their time and more interested in the time spent at work. It is the resource manager's responsibility to approve the total number of hours spent at work.

At the same time project managers will insist on approving the hours on a task-by-task basis. A project manager will not care about the entire timesheet, only those elements which apply to their projects. T TimeControl supports an approval process designed for this type of matrix organization. The *Matrix Approval Process™* supported by TimeControl allows both resource managers and project manager to approve those

elements of the timesheet data that apply to them. The resource managers approve the totals which are then frozen and the project managers can then redistribute any mis-categorized hours without changing the totals through a debit/credit process. Of course any changes made are completely tracked for auditing purposes.
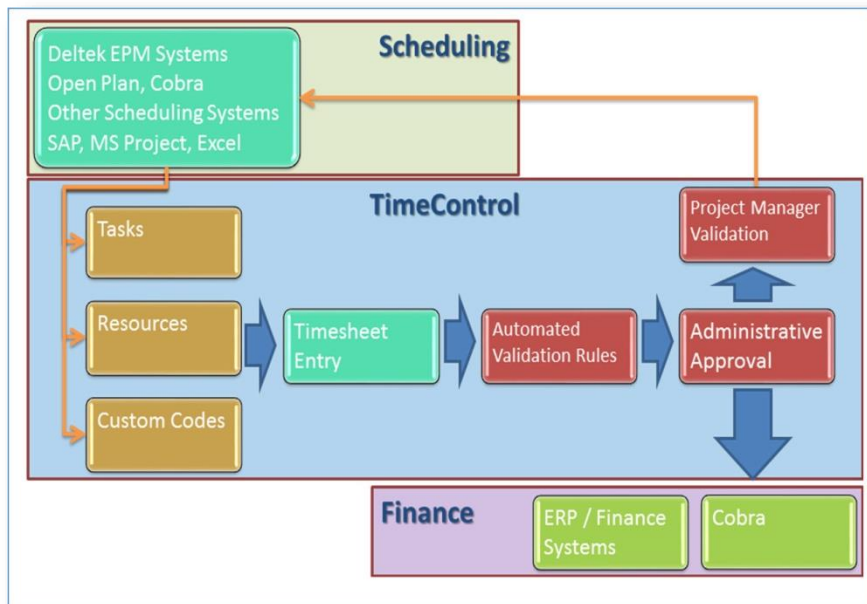
Having an approval process which supports both of these types of approvals is critical to a

timesheet which will work for both financial and project management purposes. This approval process ensures that a) the timesheet can be used for multiple purposes thus reducing redundancy; b) the data meets the approval standards for both parts of the organization making it acceptable for multiple use and eliminating the need for reconciliation of data from multiple sources; c) everyone who needs to be involved in verifying the data has an opportunity to do so.

Automated business rule approvals

TimeControl includes *Automated Validation Rules.* This functionality allows business rules to be applied to the timesheets automatically by the system at the moment the timesheet is released by the end user. Rules can apply to all timesheets or only some timesheets and an unlimited number of rules can be defined. If the rule is not followed TimeControl can define either an error message or just a warning. Rules can be created to catch simple typographical errors such as "no more than 24 hours per day" or "no sick leave on weekends" or more complex business rules such as "no overtime unless you are both a wage employee and have done at least 40 hours of regular time this week. Automated validation rules effectively distribute a major element of the approval process to everyone who enters a timesheet, allowing it to be corrected by the people who can do so most effective; the person who did the hours. Implementing validation rules ensures that data that enters TimeControl and thus the corporate environment is immediately of very high quality and this serves to make the entire approval process much, much faster.
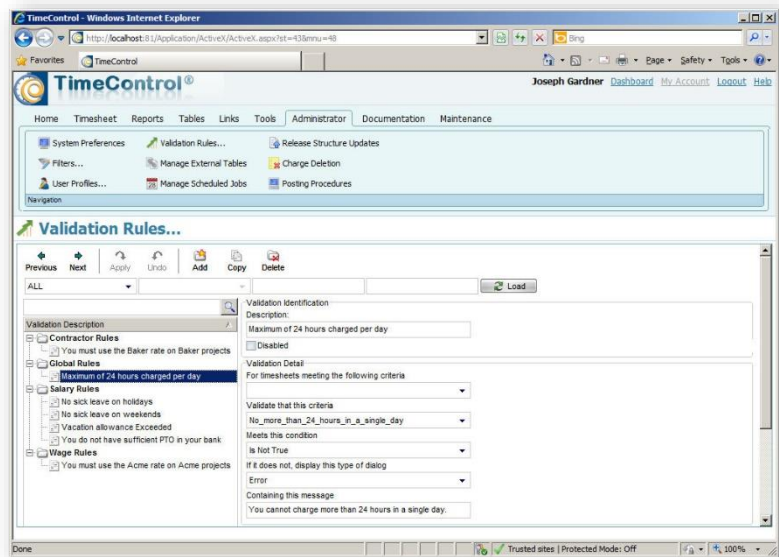
Integrate with Finance/ERP systems

Given TimeControl's ability to manage financial quality data, the timesheet data from the system is ideally suited to link to major ERP and other legacy financial systems. TimeControl includes a General Link function designed to create transaction files for virtually any financial system including ERPs such as SAP, Oracle Financials, PeopleSoft or, Baan. This link is also used to generate transfer files for payroll services such as ADP or most major banks. The Link function allows not only the order of data to be determined but can also be set to track what data was ever exported in a batch. This ensures that data is never accidentally transferred twice; a critical function when exporting for payroll, or billing purposes.

While almost all organizations do their accounting transfers this way, TimeControl's data structure is open allowing organization to link the databases of TimeControl and the ERP systems directly should that be desired. In this case, data is moved directly to the appropriate ERP table as timesheets are posted.

Historical data for project & non-project time

When data is later audited or analyzed, it is often desirable to ensure that 100% of data is available. Looking at more than just a single project's data can often give a revealing view of the conditions at the time the project was produced. When both project and non-project data is included, analysis of the complete record can often reveal a great amount of detail.

For example, looking at a particular period of time might reveal excessive sick leave, perhaps showing the results of a flu bug which affected productivity or, showing all project data might show that more work was focused on one project vs. another perhaps due to a critical deadline or a problem with the project.

Often, analysis of non-project time shows trends that might be surprising. The amount of time spent on meetings, for example, is often an eye-opener for management. Using a system that is used as the corporate timesheet system for all time allows for all data to be analyzed together.
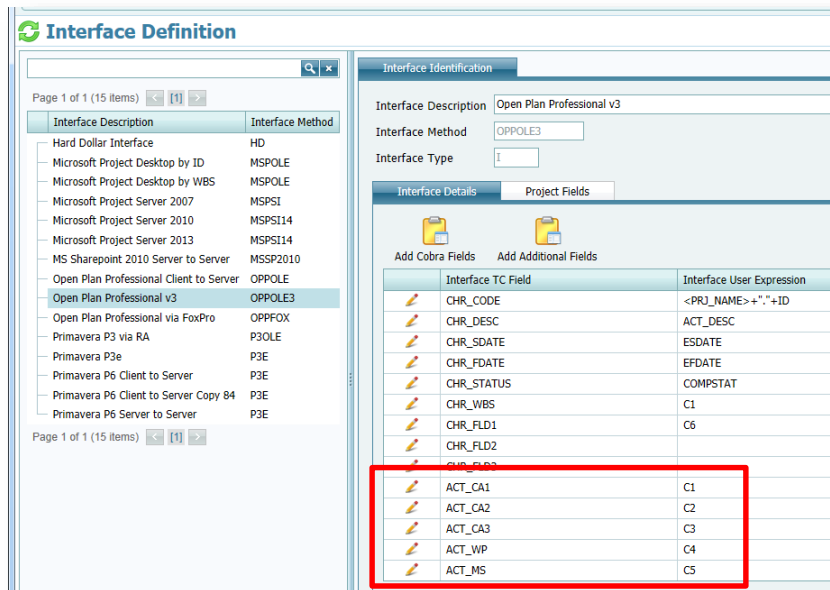
TimeControl has had a link to Deltek Cobra since its very first version. In order to determine how the links should be established, the client must make several decisions:

1. Will Cobra be used in conjunction with a scheduling system such as Deltek Open Plan or Microsoft Project?
2. If Cobra will be used with a scheduling system, do all 3 systems need to be kept synchronized?

Cobra allows for Costs be defined at the Cost Account, Work Package or even Milestone levels. Most typically, costs are loaded within Work Packages.

A cost account is most typically defined as the intersection of a OBS And WBS code but Cobra Cost Accounts can be defined as one, two or even three dimensional structures. A 1-dimensional structure is a straight list or hierarchical list of codes contained in the CA1 field. An example of such a structure would be a financial chart of accounts. A 2-dimensional structure would use 2 straight or hierarchical lists such as the classic OBS/WBS and a 3-dimensional list could take into account a 3rd straight or hierarchical list. TimeControl has been created to support all these definitions in the TimeControl Interface Definition.

dimensional list could take into account a 3rd straight or hierarchical list. TimeControl has been created to support all these definitions in the TimeControl Interface Definition.

1. Linking TimeControl only to Cobra

If the client is not using any scheduling software or, if they are not intending to keep both Cobra and the scheduling systems synchronized, then the integration from Cobra to TimeControl is very simple. The Cost Account, Work Package and Milestone structures along with their associated descriptions are exported from Cobra and a Table import in TimeControl establishes the list of Charge codes within each project.

2. Linking TimeControl to Cobra and Project Scheduling

If the client intends to keep the scheduling tool, Cobra and TimeControl all synchronized, then we first must discuss the potential synchronization between scheduling and Cobra. This is covered in much more detail within Cobra documentation, but at its core, what is important is that many scheduling activities may go into a particular work package. The recommendation is to use user-defined codes such as the C1, C2, C3, C4, C5 codes within Open Plan to maintain the Cost Account (by 1, 2 or 3

dimensions) and the Work Package and Milestone IDs. Cobra will use this information to bring the appropriate schedule updates to the appropriate elements within Cobra and to identify the appropriate tasks back in the scheduling tool that are associated to each Cobra element.
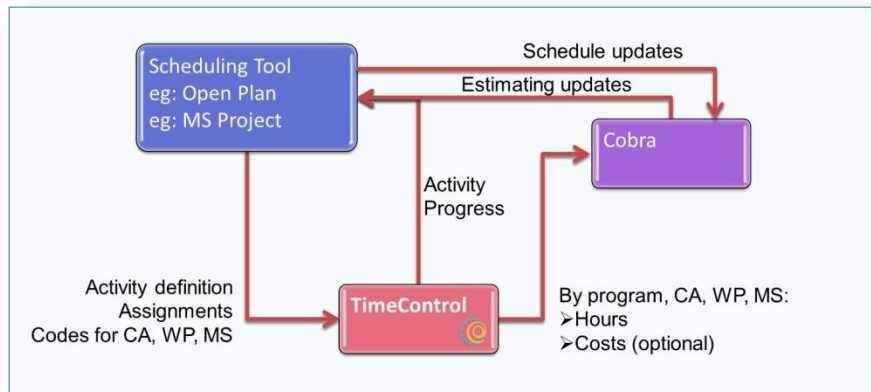
In this case, TimeControl can adopt the same structure and bring these codes automatically into chargeable tasks within the timesheet. In this way, the end users would see a list of tasks and update their hours and optionally their progress into each task. The project schedule would be updated by TimeControl with the tasks progress as well as hours and costs. A transaction file will be created separately for Cobra which would be defined by the extra fields in the Charge Table so that the transaction file can be summarized by Cost Account, Work Package, and Milestone as required.

# When should you use TimeControl with Open Plan or Cobra?

The fundamental litmus test for whether TimeControl is appropriate to integrate with Open Plan and Cobra is this: "Does the organization plan to use timesheet data for financial purposes?" If the answer to this question is yes, the organization should consider a timesheet such as TimeControl in order to manage data to financial standards.

Here are some questions that may help you determine if you should be considering integrating TimeControl with Open Plan and/or Cobra.

1. If you wish to track timesheet data for both project <u>and</u> non-project personnel

2. If you wish to track both project <u>and</u> non-project time (e.g. task time and vacation time)

3. If you require multiple labor rates. For example the hours for a particular employee may use one rate on one project and another rate on a separate project plus the hours must calculate the internal or actual costs for that employee

4. If you wish to support multiple project scheduling systems (e.g. Open Plan and Microsoft Project)

5. If the timesheet data will be used by both Open Plan and Finance (e.g. Payroll or Invoicing)

6. If your project management environment includes sending labor actuals both to Open Plan for task status and Cobra for Earned Value analysis.

7. For complex overtime situations such as tracking banked time or flex time or different overtime rates

8. If you require Matrix Approvals (both Finance and Project Management) of the timesheet data

9. If the timesheet data must be compliant with a government agency such as the DCAA (US Defense Contract Audit Agency), or other government standards such as Sarbanes Oxley or the EEC Work Rules, or any other auditable work rules.

10. If you require automated validation rules where business rules can be defined within the system and automatically applied.

11. If you require auditable timesheet data for any purpose including capitalization, R&D tax credits or just financial accountability.

In today's challenging economy, tracking productivity is more important than ever. It is no longer enough to know only how much time has been spent. Now management demands that you know what was done with the time. Many organizations are turning to project and task based management as a way of being more effective. One of the most difficult aspects of implementing project control is the capture and approval of labor actuals. *TimeControl* provides an electronic timesheet system designed to serve both Finance and Project Management
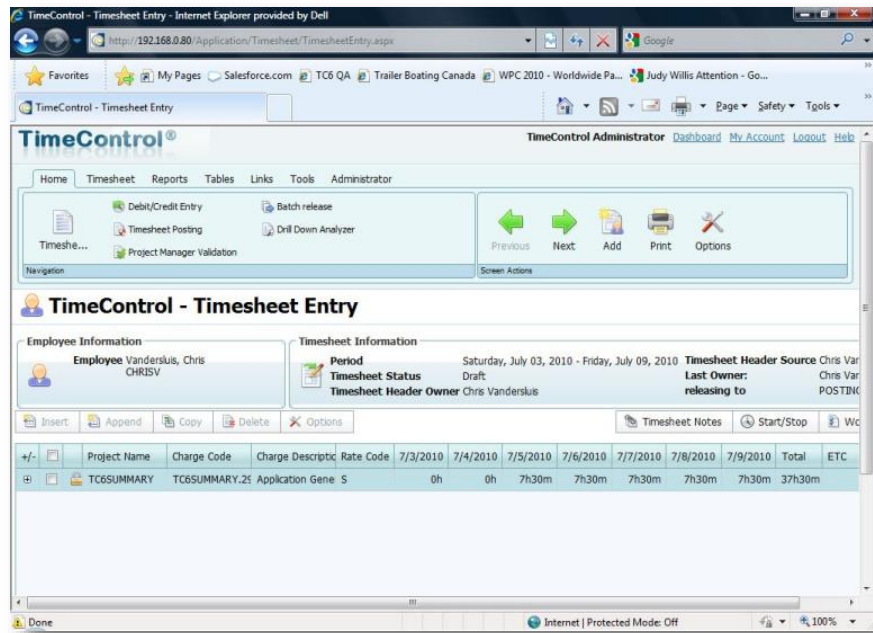
Install On-premises or subscribe in the Cloud Online

TimeControl is aviable both as a purchasable license to be installed on your premises or in a subscription model with our Timesheet as a Service TimeControlOnline. You can find out more about our online subscription at www.timecontrol.net.

Open Architecture

TimeControl is an open architecture system which supports a variety of databases including Microsoft SQL Server, Oracle, Sybase and MySQL. Customizable user profiles allow the *TimeControl* interface to be tailored to each user's requirements.

Easy to use web interface

TimeControl's interface is browser-based and user-intuitive. User Profiles determines what the user will be presented with and the user can define where TimeControl should start and what defaults they wish. End users can use a variety of browsers such as Internet Explorer, Firefox, Chrome, Safari, Mozilla or even an iPad. (Administrators must use Internet Explorer.)

TimeControl Mobile is included

TimeControl includes <u>both</u> a browser-based web interface <u>and</u> a mobile interface that can be used from your Smartphone. Whether you use an iPhone, Blackberry, Android or Windows Mobile7 device, you can access your TimeControl from wherever you are.
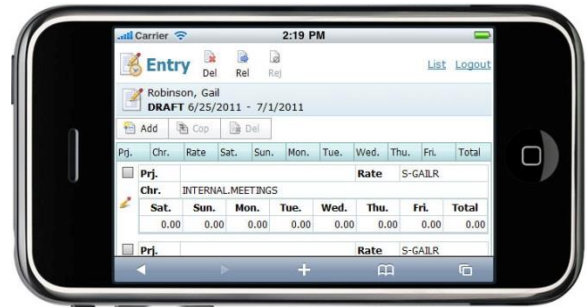
Multi-lingual

We know that not every user speaks English as their first language. TimeControl comes with a number of languages already in the system but every label and every message is open to the TimeControl Manage Languages module so you can change the existing translations or even add your own. This is a great feature for adjusting terminology in the system to match your organization's (The only word you can't change is: "TimeControl").

Timesheet Approvals

TimeControl supports HMS Software's unique Matrix Approval Process for Labor Actuals which allows for quick authorization of project data. This process resolves the inherent conflict that is found when both the financial and project management hierarchies must approve timesheet data simultaneously. Automated validation of timesheet data is handled by TimeControl's remarkable Validation Rules . Additional approvals can be done manually with a simple Approve/Reject or Approve/Update process. The Project Manager Validation screen displays an easy-to-view hierarchical interface for managing project approvals.

Total Flexibility with User Profiles

TimeControl's User Profiles allows the Administrator to determine which menu choices, reports and fields are accessible by each user. The entire interface can be tailored to the user's individual needs. No other system on the market today offers this much flexibility.

Field level security ensures that only the information which is important to each user, is displayed. Fields can be made read-only or invisible, removing them from view entirely. This makes *TimeControl* at once a secure, deployable system and an easy-to-use one as well.

Links to Project Management Systems

TimeControl includes direct links to project management systems including Oracle-Primavera versions P3 through the most current P6, Deltek's Open Plan and Cobra and Microsoft's Project, and Project Server. In fact, multiple products and versions can be supported simultaneously.

Integrating with a project management system drastically reduces timesheet errors as only valid tasks will be available in which to charge time. Hours entered in *TimeControl* are returned directly to the project management system as activity and resource progress.

TimeControl also supports customizable export formats for integration with virtually any financial or HR system.

Vacation Approvals with TimeRequest™

The TimeRequest module allows users to make a request for certain types of times to be approved for entry in future timesheets. The most common application of this module may be for requesting Vacation time off. Once approved, the time is then automatically entered by *TimeControl* into the appropriate future timesheet.

The TimeRequest module is, however, not restricted to just Vacation requests. Any category of time can be exposed to the module. This allows an infinite number of applications such as for travel time, training time, offsite or onsite time or any other type of time category where the organization wishes it to be approved in advance.

E-mail Enabled

TimeControl allows email notifications to be sent for various events such as missing timesheets, incomplete or non-approved timesheets as well as timesheets that were rejected or re-released for approval.

Expense Reports

TimeControl includes extensive expense report functionality. Users can enter an unlimited number of expense report items for each timesheet line.

Links to Payroll, HR and ERP/Finance

TimeControl is designed with a Links module that lets you define links to corporate systems and software including Payroll software or online services, Human Resources systems and ERP/Finance systems.

Using TimeControl to fulfill the requirements of not only project management but also Finance, HR and Payroll means you can eliminate the costs and inefficency of mlutiple timesheets.

Reporting

TimeControl's reporting engine looks just like Excel™. Reports can even be saved in Excel or HTML format.

TimeControl's Reporting Wizards make report generation easy. *TimeControl's* field-level security is always active so only the fields which a user has permission for will be shown.

Predefined reports are available in a variety of formats which include posted timesheet data, table lists, printouts of the timesheets themselves and missing timesheet reports.

For more information

For a more complete description of TimeControl and its features, visit www.timecontrol.com. To try the timesheet system for free, visit freetrial.timecontrol.com.

Purchase or subscribe
- ❑ Purchase **TimeControl** for an on-premises installation or;
- ❑ Subscribe to **TimeControl Online™,** our hosted timesheet solution in the cloud

Easy to use Interface
- ❑ Full web-based browser interface with multiple browsers supported
- ❑ TimeControl can be implemented within a SharePoint interface or a Microsoft Project Web Access interface
- ❑ Scaleable user profiles facilitates use for data entry users yet provides full functionality for administrators
- ❑ Multilingual
- ❑ Unlimited charge codes displayed in simple, hierarchical drop-down lists
- ❑ Unlimited free-form notes for each line item and each timesheet
- ❑ E-mail-enabled. E-mail messages sent for system notices such as rejected timesheets or missing timesheets
- ❑ Scheduleable E-mail notification for missing or unapproved timesheets.
- ❑ Predefined timesheets based on resource assignments from the project management system or by user input
- ❑ **TimeControl Mobile™** web interface for smartphones or tablets included

Robust Architecture
- ❑ Open database architecture; support for Oracle, Microsoft SQL Server, Sybase and MySQL databases
- ❑ N-tier architecture makes system scaleable for 10 to 100,000 users
- ❑ Unlimited rate codes per employee
- ❑ Field-level security. Make any field visible, value read-only, or invisible
- ❑ Complete redefinition of every field label
- ❑ Complete auditability of timesheet data
- ❑ User-defined fields on every table
- ❑ Add pop-up data validation for each user-defined field
- ❑ Allows charges to be linked to a specific project or project-independent
- ❑ Multiple overhead charge types
- ❑ Filter charge codes, projects and rates visible to any employee

Web Interface
- ❑ MyTimeControl™ home page dashboard gives extensive and customizable dashboard information TimeControl is multi-browser and multi-device compliant

Expense Reports
- ❑ Users can enter non-labor costs on their timesheet
- ❑ Unlimited number of expense items per timesheet line item
- ❑ Expenses can be tracked back to a project management and/or finance system

Approval Process
- ❑ HMS's unique *Matrix Approval Process for Labor Actuals™*
- ❑ Unlimited automatic Validation Rules are user defineable, flexible and can be applied globally or to any group or even an individual
- ❑ Unlimited manual validation levels in which each employee can have a unique approval routing
- ❑ Project Managers or Account Managers can preview and redistribute hours prior to linking with a project management system or exporting to Finance

Links to Project Management
- ❑ Direct integration with popular project management systems such as Microsoft Project and Project Server, Oracle-Primavera's P6, Hard Dollar's HD and Deltek's Open Plan and Cobra
- ❑ Supports multiple project management systems and multiple versions simultaneously
- ❑ Customizable import/export function to interface with virtually any finance or ERP system including SAP, Oracle, PeopleSoft and Microsoft Dynamics
- ❑ Interface can be stand alone or integrated directly into SharePoint, Microsoft Project Web Access

Time-off Approvals
- ❑ **TimeRequest™** module allows vacation, personal or other leave time to be requested for approval
- ❑ TimeRequest allows multiple levels of approval
- ❑ TimeRequest automatically populates future timesheets with approved time off
- ❑ Administrators can pre-populate time-off timesheet entries for events such as holidays

Flexible Reporting
- ❑ Excel-like reporting format allows output to any Windows-compliant printer or can be saved as Excel, XML or HTML files
- ❑ Reporting Wizards allow an unlimited number of reports to be created and saved for later use
- ❑ Unlimited levels of data selection, filtering and sorting
- ❑ Drill Down Analyzer provides instant ad-hoc analysis of data at any level

TimeControl Industrial Features
- ❑ Crew timesheet entry
- ❑ Material/Equipment usage entry
- ❑ Extended Crew rate structure
- ❑ Extended Materials rate structure
- ❑ Integrate multiple remote sites
- ❑ Define crew lists
- ❑ Unique approval path for crews, material and equipment entry

Government Compliance
- ❑ Complies with requirements for DCAA, European Time Directives, R&D tax credits, FMLA, the California Wage Laws and Sarbanes-Oxley

HMS Software Partial Client List

Engineering/Construction
Aecon Construction
AeroInfo
Koch Business Solutions
Kongsberg Devotek
Thompson Beta

Gas / Utilities
Gulf South Pipeline
Acergy
Petrocon
VenCorp
Foster Wheeler

Manufacturing
Alcan
Parker Hannifin
Georgia Pacific
Ultra Electronics
Tennant
Wagner Spray Tech
Vision Systems
Electro Motive
GE Sensing
Tommy Hilfiger

Defense / Aerospace
Bombardier Inc.
CAE Electronics
Lockheed Martin
Rolls Royce
SAAB
Army Corps of Engineers

Government
Amsterdam Port Authorities
Atlanta Airport
Dutch Railway
Government of Saskatchewan
Railway Procurement Agency (UK)
Ville de Montreal
City of Winnipeg

Technology
Arivia
CSI Piemonte
EDS
Face Technology
Fuel Plus Software
GE Access
Microsoft
Positron
Psion Teklogix
Inventure
Fujitsu

Telecommunications
Cable & Wireless Bartel
Ericsson
EXFO
Motorola
Philips Semiconductors
SARA Amsterdam
Stratos Global

Financial
Standard Life
Development Bank of Canada
Alliance One
Centre de Recherche Informatique de Montréal

Health/Pharmaceutical
Boehringer Ingelheim
National Health Service (UK)
Azko Nobel (Organon)
RTS Thurnall
Canadian Institute for Health Info
Iogen
Registrat

Education
Johnson and Wales University
Eastern Michigan University
Queens University
McGill University

HMS Software, a division of Montreal, Canada-based Heuristic Management Systems Inc., is a leading provider of enterprise timesheet and project management systems. HMS is a Deltek ISV partner and its relationship with Deltek stretches back to 1985 when HMS became an Open Plan and then Cobra distributor.

Founded in 1984, HMS Software's expertise in implementing enterprise project-management and enterprise timesheet systems is recognized worldwide by some of the world's best known organizations. HMS's signature product, TimeControl, an enterprise timekeeping system designed to serve the needs of both Finance and Project Management, is distributed worldwide through an extensive list of distributors and dealers located on every continent with representatives in the US, the UK, Australia, Mexico, Europe, Asia, South Africa and the Middle East.

HMS Software's client list includes some of the world's leading corporations in the telecommunications, IT, finance, engineering, defense/aerospace and government sectors including such organizations as Rio Tinto, the Atlanta Airport, the City of Montreal, the County of San Mateo, Electromotive Diesel, EXFO, FT Services, Kelly Services, Koch, the Government of Quebec, Georgia Pacific, Parker Hannifin, Rolls Royce, Sobeys, Volvo Novabus, Zimmer Inc. and hundreds of others. HMS maintains offices in Montreal, Quebec and Toronto, Ontario.

For more information about HMS, please visit www.hmssoftware.ca.

TimeControl

First published by HMS in 1994, TimeControl has been adopted hundreds of clients and over 150,000 users around the world. TimeControl is designed to serve the needs of both project and finance simultaneously. It allows an organization to use a single timesheet for project tracking, time and attendance, time and billing, HR tracking, R&D Tax Credits, DCAA and project costing instead of having to deploy many timesheets to serve these needs. TimeControl is available for purchase for an on-premises implementation or as a subscription as service. TimeControl's architecture is flexible and extensive supporting numerous databases such as Oracle, Microsoft SQL Server and MySQL, multiple browsers such as Internet Explorer, Firefox, Safari and Chrome and even includes a mobile interface for Smartphones

For more information about TimeControl please visit: www.timecontrol.com.

Strategic Services

In addition to being a publisher of one of the world's best known timesheet systems, HMS provides a full range of support services including technical support, training and consulting tailored to meet clients' specific needs. HMS Software consultants are skilled in activity-based-costing, timekeeping methodology, project management techniques, cost and earned-value management as well, of course, in the HMS-supplied products.

For more information about HMS Software services, please visit www.hms.ca.