



Buy it or Write it?

An Analysis of buying TimeControl[®]
vs. writing a custom-built timesheet
system

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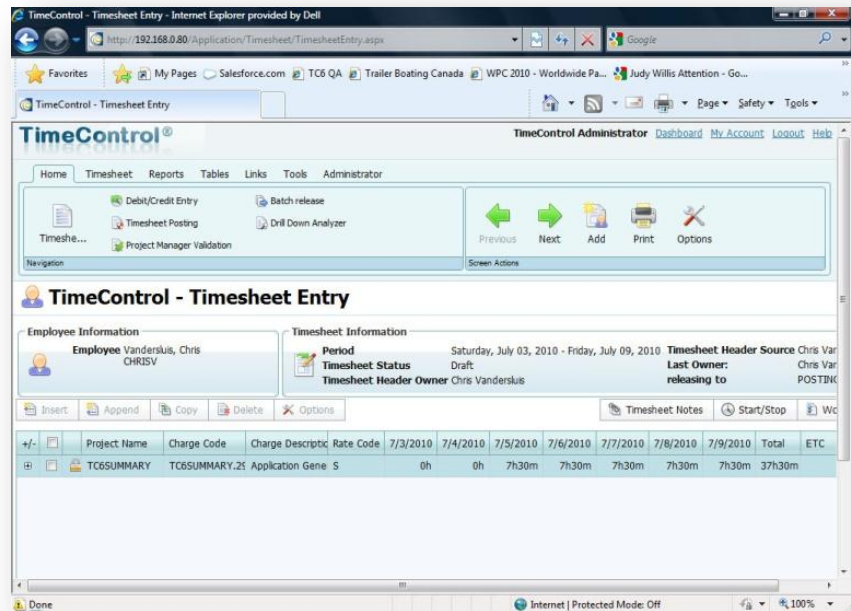
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At HMS Software, we occasionally hear from companies that tell us they don't feel the need to buy a timesheet system like TimeControl because they would prefer to write a timesheet system themselves.

TimeControl is a dynamic timesheet application that includes over 25 years and 100 man-years of design, coding and innovation. It is unlikely that a company considering developing an internal timesheet system, would have that much experience in-house. For organizations that are interested in creating their own custom-built timesheet system, it is important to consider what you can create internally and the true cost of ownership.

One of the aspects of timesheets that is not often appreciated at first glance, is that timesheets may be used for the least amount of an employee's week but the data represented is often some of the most critical business data in the organization.



Timesheet data can be the source data for payroll, for client billing, for project statusing, for R&D tax credits, for Sarbanes-Oxley compliance, DCAA compliance, for managing banks of overtime hours and for managing any entitlement time like vacation or sick leave. As a result, the number of people and departments who feel they must be involved in a timesheet decision can rapidly expand to include personnel and management from a wide spectrum of the organization.

HMS has been developing timesheet systems for use with both Finance and Project Management departments since our very first client in 1983. Our expertise includes timesheet systems for use as time and attendance, time and billing, HR tracking, project status time, and R&D and other government compliances.

This paper outlines some of the challenges organizations will face if they want to write their own timesheet system. HMS has prepared this white paper based on our 25 years of experience custom designing and writing timesheet systems.

The challenges of writing your own timesheet

Any team tasked with creating a corporate or department level timesheet faces a number of challenges. First among them is determining what about the internal requirements has necessitated custom designing a timesheet rather than selecting a Commercial-Off-the-Shelf (COTS) application. There are some situations where the needs of the organization are so specific that no commercial system can meet them and the organization must then decide if the additional expense, delay, effort and distraction of writing the custom timesheet will be worth servicing those specific requirements.

Next, the team must determine who it is writing the timesheet for. Who is the client? Are there already timesheet systems in place? Will these systems need to be replaced? Is the design of these systems known?

Often, a new design team that thinks of writing a timesheet system, stops its estimate at the interface which is, by far, the easiest aspect of the application to write. By far more complex, are all the business rules that must be articulated, designed and ultimately created.

If an organization decides to write their own timesheet, here are a few of the challenges that must be overcome.

Internal design expertise

A timesheet interface is a simple thing to create, mostly because all timesheet interfaces contain the same components: a grid in the centre of the screen to which time is charged on the left-hand side, and amount of time charged across the top. Users enter hours, time, percentage or other indicator that represents how much time they have spent.

However, the interface is only the tiniest portion of a complete timesheet design. In order to complete an organizational timesheet, the organization must identify the internal expertise to design it. Often this expertise is not found internally or the design team must call on the expertise of many different employees who are not system designers.

One of the greatest challenges the design team faces initially is to identify who in the organization will need to have input into the final timesheet system. This first hurdle is usually a big one as it is not uncommon for timesheet design to involve the efforts of experts from IT, Finance, Payroll, HR, Project Management, Account Management, as well as Senior Management. The input of these contributors can be diverse or even contradictory. Their interests will need to be marshaled by a business analyst with extensive experience.

In a worst case scenario and unfortunately the most common scenario, a critical element gets overlooked during the internal design phase that makes the resulting system undeployable and necessitates a rewrite before the system is ever implemented.

Distractions from your core business

The kinds of designers and programmers required to write an enterprise timesheet system are often some of the most experienced in the organization. A typical timesheet team consists of four to eight people who will work from six months to two years to complete the project. Since the design of an organizational timesheet often touches the highest levels of Management within Finance, Project Management and Operations, senior designers and programmers will often end up on this team.

These resources will not, of course, be available for much else while the timesheet project is underway. The core business of the organization will be impacted by the loss of these resources during the design phase. Also, Senior Management will need to be involved in the design and this, too, takes key personnel away from their core responsibilities. .

The true cost of these interruptions is difficult to calculate but it can be significant. This is particularly true if the organization is currently going through a period of rapid growth or a period of business challenge.

Delay until return on investment

Even with the perfect design, the perfect timesheet development team and complete cooperation from every involved manager during the design phase, there is a gap of time between the start of creating the timesheet system and the resulting deployment if you are writing the timesheet internally. If we accept that the team will not create a commercial quality system but rather a system designed only for internal use and that niceties like customized help, documentation, menu-driven flexibility etc. will not be required, it is common for an internal timesheet development project to take from six months to two years. During this time, whatever the anticipated benefit, the Return on Investment (ROI) will not be delivered.

Automating a timesheet system can generate efficiency savings of between 5% and 15% within an organization by:

- a) having more accurate data of what personnel are doing with their time;
- b) avoiding paying for time personnel are not working and;
- c) avoiding excess time spent on timesheet collection and approvals.

Even if we calculate the potential efficiency savings at 1% of an employee's time, a commercial system like TimeControl is often paid for by increased efficiency in under three months. When the cost of the delay of received benefits is included in a Buy or Write analysis, buying a commercial system is almost always a better business decision.

Project risk

Many organizations that undertake the design of a custom-built timesheet system underestimate the project in several ways:

- a) they underestimate the total cost of design, programming, testing and deployment;
- b) they underestimate the size of team required to complete the project;
- c) they underestimate the skill and experience level required by the team members to adequately staff the project;

- d) they underestimate the time required to complete the project to Finance system standards, and;
- e) they underestimate the complexity of the design.

As a result, many custom-built timesheet projects are abandoned prior to completion. The cost to the organization in this case is compounded. Not only has the organization suffered the distractions of the project, the costs of the incomplete project and the lack of efficiency while the organization waited for the benefits of the project, but they still have no timesheet and must now either start over or return to the selection and decision-making of purchasing a commercial system.

Developing to commercial standards

It's a given that in-house custom systems will not be written to commercial standards. This does not mean the software is poorly written, just that a range of features and advantages that you would expect in commercially distributed software are unlikely to be found here. These 'niceties' might include:

- Installation and System Documentation;
- User Documentation;
- Online help;
- Localization for multi-language, multi-currency or other multi-national requirements;
- Menu-Driven configuration for security, system options, and business validation rules;
- Menu-Driven flexibility for user-defined fields, field relabeling, report writing or other user-manageable changes.

The result of these types of absent features is that a development team must continue to be made available after the project is complete for ongoing requests. For example, a user-defined field cannot be added by an Administrator if there is no menu-driven function to do so. Therefore in order to add a single field to the internal timesheet system, a programmer must add it directly into the database and then label or relabel it as the Administrator requests. It must then be made visible on the screen on which it is required and within reports that have already been written by the programmers.

The ongoing support cost of an internal application is always higher than the support costs of a Commercial off-the-shelf system.

Benefits of buying TimeControl

The key benefit of purchasing a commercial off-the-shelf timesheet application such as TimeControl, is based on the business model of creating the system for many clients rather than just one. The investment HMS Software has made in its timesheet product is amortized across hundreds of clients and hundreds of thousands of users worldwide.

The potential benefits for an organization which chooses to buy TimeControl rather than write their own timesheet system, are significant.

Time to solution

TimeControl is one of the fastest enterprise timesheet systems to deploy. A deployment for an organization of a few hundred users can be completed in a few days and virtually always within a month. For multi-thousand-user deployments, a TimeControl implementation is typically accomplished within three to six weeks and deployment to the entire organization within two to three months at most.

The advantage of this time to solution is that your organization will start to receive a return on investment immediately rather than waiting six months to two years before it can even begin to deploy and to then see the benefits. This extra time can represent enormous savings in both efficiency and costs.

Ongoing Support, Maintenance and Upgrades

HMS is innovating all the time. A maintenance update of TimeControl is typically released every six to eight weeks and a major upgrade of the system that includes additional and enhanced functionality, every 14 months. This is possible because HMS is able to amortize our development investment across hundreds of clients.

Maintaining a full-time development team that will enhance a commercial system makes a lot of business sense but the same logic does not apply to organizations that wish to create their own internal system. Once the organization's internal timesheet is written, the team is typically disbanded. This makes ongoing enhancements or major upgrades of an internal system difficult if not impossible. Choosing TimeControl means that you are also choosing continual evolution of your timesheet system.

In today's technical world, enterprise systems depend on a number of technology layers. These layers are changing all the time. Databases, middleware servers, client operating systems, Project Management and Finance/ERP systems, firewalls and even the browser software on each user's workstation are being updated weekly. In order to keep up with these changes in technology, a support team must be maintained just to keep the timesheet system up to date.

Not only is TimeControl's evolution based on input from HMS' Development and Consulting teams, but many TimeControl clients have contributed to its evolution. TimeControl is the

result of the contribution of hundreds of world-renowned organizations who have chosen to use it and future clients will benefit from the features that are a result of this input.

Help desk support

HMS maintains full-time help desk support for clients who experience difficulties with TimeControl. The Help Desk Support Team is dedicated to the timesheet system and is trained in the functionality of TimeControl as well as the technology layers that support it. Our Help Desk Support Team is able to take care of hundreds of TimeControl clients around the world.

If an organization decides to write and support its own timesheet system, the following should be taken into consideration:

- Who will be supporting the system?
- Are there sufficient resources to allocate to a dedicated support team for the application for the long term?
- If support of the timesheet has to be offloaded to regular help desk personnel, will they be able to sufficiently support the application without prior knowledge of how the system was built?

A world of functionality

As a commercial product, TimeControl's functionality is diverse and extensive. TimeControl has been selected for use by some of the world's most recognizable organizations. While not every function in TimeControl is used by every client, buying TimeControl rather than creating a custom-built timesheet makes all of that functionality available for future use by that organization.

Among the many areas of functionality that have made the difference in a "Buy it" or "Write it" decision for some of our clients include:

- Matrix Approvals and the entire approval process
- Automated Validation/Business Rules that can be applied flexibly at any level
- Flexibility of user-defined fields, language management and field renaming
- A flexible report writer
- Drill-down analysis for ad-hoc queries of timesheet data
- Pre-existing project management system links for Microsoft Project, Microsoft Project Server, Primavera, Open Plan and Cobra
- A flexible exporting module for user-managed links to Finance, ERP, HR, Payroll systems and services
- A strong security architecture which is user-managed and supports security control down to the field level
- Proven auditable structures for data and adjustments

Buy vs. write analysis

We've made an analysis on the total cost of ownership for an organization considering buying TimeControl vs. writing their own timesheet system. The prices are based on a U.S.-based purchase of TimeControl and prevailing rates for development personnel. TimeControl's prices vary by geographic region and by volume and can change due to market conditions. HMS does not warrant that these prices will be exactly what you would pay for deploying TimeControl. However, to the best of our knowledge, the comparison is accurate at the time of this writing.

For up-to-date pricing for your area, please contact HMS Software.

Purchasing TimeControl (100 users)

	Year 1	Year 2	Year 3
Cost of TimeControl (100 licenses)	\$12,000	\$0	\$0
Annual Maintenance	\$0	\$0	\$0
Support/Upgrades	\$0	\$2,400	\$2,400
Total	\$12,000	\$2,400	\$2,400
Cost Per user per year	\$120	\$24	\$24

Purchasing TimeControl (1,000 users)

	Year 1	Year 2	Year 3
Cost of TimeControl (1000 licenses)	\$70,000	\$0	\$0
Annual Maintenance	\$0	\$0	\$0
Support/Upgrades	\$0	\$14,000	\$14,000
Total	\$70,000	\$14,000	\$14,000
Cost Per user per year	\$70	\$14	\$14

Writing your own timesheet system

In order to analyze the costs of creating an internal timesheet system, HMS Software is assuming that the programming tools and skills of the internal staff are already in place and are readily available.

The average time to complete an internal timesheet system ranges from six calendar months to 24 calendar months with a team of four to eight design/programmers. .

We are also assuming the following:

Skill	Quantity Required	Duration in months	Annual Cost per person
Senior Business Analyst	1	2 – 6 months	\$90,000
Programmers	2-6	Complete project	\$60,000
Documentation	1	3 – 6 months	\$50,000
Quality Assurance	1-2	3 – 6 months	\$60,000

Taking a conservative view of a six-month project with a total FTE (Full Time Equivalent) of four project members, we calculated the following:

	Year 1	Year 2	Year 3
Senior Business Analyst (2 months)	\$15,000	\$0.00	\$0.00
Programmers (3 total for 6 months)	\$90,000	\$0.00	\$0.00
Documentation (1 month)	\$5,000	\$0.00	\$0.00
Quality Assurance (3 months)	\$15,000	\$0.00	\$0.00
Technical Support	\$0.00	\$30,000	\$30,000
Total	\$125,000.00	\$30,000.00	\$30,000.00

Here are some additional assumptions to round out the calculations:

- The system that could be designed by this sized team is for departmental-sized use for several hundred up to 1000 users. For larger organizations, the internal work required to complete the project can easily double or triple. A typical internal timesheet development project ranges in duration from a minimum of six months up to two years;
- Development includes system design, programming, testing, minimal on-line help and minimal documentation;
- Only the minimal functionality for that organization would be created not the full functionality of TimeControl;
- The resulting system would be a web-based interface;
- Ongoing support to keep the system operational is estimated at a rate of 50% of one programmer per year. Ongoing support would be used to fix any identifiable bugs and to update the system due to changes in the technical environment. No allowance is made in these calculations for:
 - Help-desk support for end users
 - New functionality
 - Significant enhancements to existing functionality;

- Evolution of the system to future technology;
- The true cost of ownership should identify the potential efficiency savings from the earlier deployment that is possible with a purchase of TimeControl;
- The cost of design by personnel who will need to be involved from a variety of other departments has not been calculated.

Buy it or write it comparison

Without even considering the dramatic impact of efficiency savings and the benefits of a timesheet written to commercial standards, the direct cost savings of a commercial tool can be summarized as follows:

	100 Users	1000 Users
Purchase TimeControl		
Total Cost of ownership over 3 years	\$16,800.00	\$98,000.00
Cost per user	\$168.00	\$98.00
Develop internal system		
Total Cost of Ownership over 3 years	\$185,000.00	\$185,000.00
Cost per user	\$1,850.00	\$185.00
Total Savings of purchasing TimeControl		
	\$168,200	\$87,000

The 1% Challenge - Calculating efficiency savings

This analysis would not be complete without some consideration to one of most significant advantages of purchasing a commercial off-the-shelf timesheet system such as TimeControl. The “efficiency savings” come from the organization being more efficient due to the deployment of the timesheet system. Being able to deploy a commercial timesheet system faster because it already exists means this return on investment will accrue earlier. The calculation below gives an example of the impact of these savings.

Most organizations expect an improvement in efficiency from automating a timesheet system. There are a number of different possible sources of these efficiency savings which are described in detail in the HMS Software White Paper “Benefits of Using TimeControl”.

Possible reasons for improved efficiency include :

- To have more accurate data of what personnel are doing with their time;
- To avoid paying for unworked time and;
- To avoid excess time spent on timesheet collection and approvals.

Most organizations expect an improvement on efficiency of 5% to 20% but let’s take a look at efficiency savings of just a single percent. In an organization where employees work a 40-hour week, there will be savings of 24 minutes a week or less than 5 minutes a day. To demonstrate the money saved even at one percent, see the following calculation:

	100 Users	1000 Users	3000 Users	5000 Users
Annual average Salary	\$40,000	\$40,000	\$40,000	\$40,000
Total Payroll costs for 1 year	\$4,000,000	\$40,000,000	\$120,000,000	\$200,000,000
1% savings / year	\$40,000	\$400,000	\$1,200,000	\$2,000,000
Cost of TimeControl for 1 st year	\$12,000	\$70,000	\$165,000	\$275,000
Total Cost of internal system for 1 st year	\$125,000	\$125,000	\$125,000	\$125,000
Number of months to return 100% of investment on TimeControl	3.6	2.1	1.7	1.7
Total TimeControl 1 st year savings	\$28,000	\$330,000	\$1,035,000	\$1,725,000
Number of months to return 100% of investment on internally developed system	9.60	8.10	7.65	7.65
Total savings at the end of 1st year based on six-month internal development (total savings are ½ of a full year)	(\$105,000)	\$75,000	\$475,000	\$875,000
Money saved by selecting TimeControl	\$133,000	\$255,000	\$560,000	\$850,000

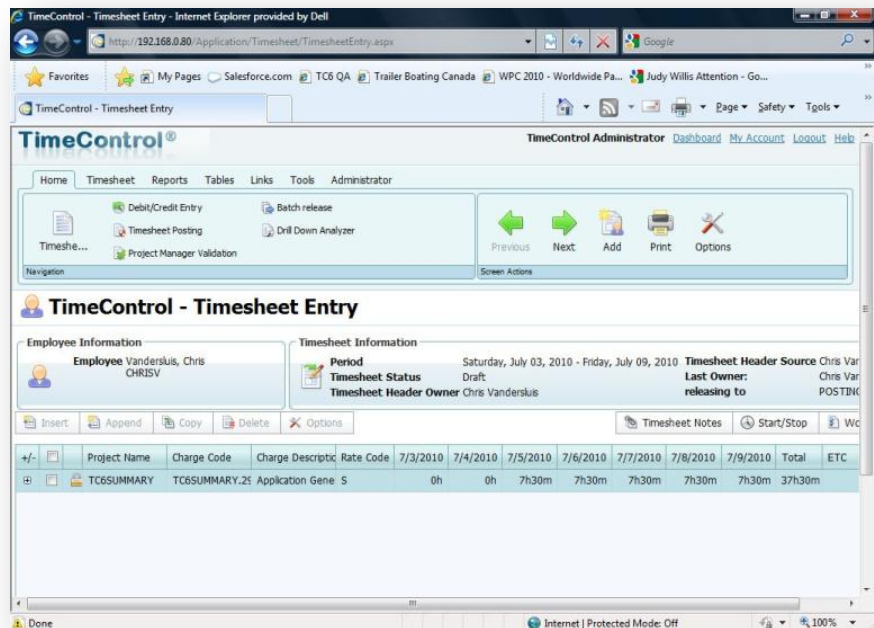
The business benefit of choosing TimeControl

For organizations that decide to move forward with a custom development, there are a few implications to consider:

Customized Development	Purchasing TimeControl
<ul style="list-style-type: none">❖ Delivery of your customized system and the start of your implementation process will be <u>at least</u> six months to two years from the start of the project.	<ul style="list-style-type: none">✓ Delivery of TimeControl could be within 24 hours.
<ul style="list-style-type: none">❖ Programmers and systems analysts must be available for the project. In addition, during the design and testing phases, other personnel will need to devote time to determining the system requirements, approving the specifications, testing the system through various quality phases etc. There is no allowance in our model for these costs. In addition, there is no allowance for the project management costs of the project.	<ul style="list-style-type: none">✓ TimeControl is already written. It is deliverable instantly with no programmer/systems analysts required.
<ul style="list-style-type: none">❖ Features in a customized system will often not include market-driven enhancements found in commercial systems. This places the customized system in perpetual competition with commercial systems which evolve regularly.	<ul style="list-style-type: none">✓ As a market-driven system, TimeControl will be continually upgraded and enhanced.
<ul style="list-style-type: none">❖ There is no allowance for continual improvements to the customized system.	<ul style="list-style-type: none">✓ TimeControl has been continually improved for over 15 years. Development is amortized across the hundreds of organizations and over 150,000 users who use the system.

The TimeControl multi-purpose timesheet

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 available 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

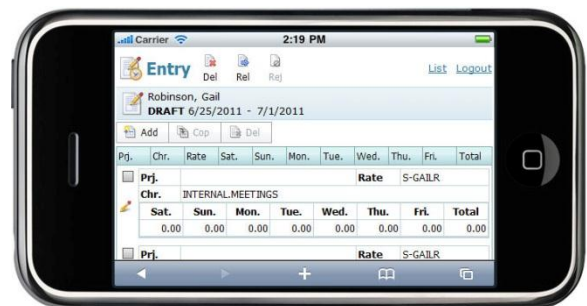
TimeControl is an open architecture system which supports a variety of databases including Microsoft SQL Server, Oracle, Sybase and MySQL. Customizable user profiles allow the *TimeControl* interface to be tailored to each user's requirements.

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 included

TimeControl includes *both* a browser-based web interface *and* 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 inefficiency of multiple 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.

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
- Scalable user profiles facilitates use for data entry users yet provides full functionality for administrators
- Multilingual with multiple languages included
- 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

Robust Architecture

- Open database architecture; support for Oracle, Microsoft SQL Server, Sybase and MySQL datazbases
- N-tier architecture makes system scalable 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 to employees

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, Primavera 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 integrated directly into SharePoint, Microsoft Project Web Access or stand alone

Time-off Request

- **TimeRequest™** module allows vacation, personal or other leave time to be requested
- TimeRequest allows multiple levels of approval
- TimeRequest automatically populates future timesheets with approved time off

Flexible Reporting

- Excel-like reporting format allows output to any Windows-compliant printer or reports 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

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

Government Compliance

- Complies with requirements for DCAA, European Time Directives, FMLA, the California Wage Laws and Sarbanes-Oxley

Hardware Requirements

- Server:
 - Windows Server 32 or 64 bit
 - .Net 3.5
 - Internet Information Services
 - MS SQL Server, Oracle, Sybase or MySQL database
- End-user Workstation
 - Web browsers: Internet Explorer, Safari, FireFox, Mozilla
- Administrator Workstation
 - Web browsers: Internet Explorer

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
logen
Registat

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.



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