



# NOVATIME 3000 ENTERPRISE EDITION

The screenshot displays the NOVATIME 3000 Enterprise Edition web application interface. The main content area shows a timesheet summary for employee [9004] BRIAN JOHNSON. The interface includes a navigation menu with options like Overview, Summary, Timesheet, Schedule, Accrual, and History. The main data table shows the following information:

Department	Job	Pay Policy	Shift Number	Pay Category	Holiday Rule
520	300	3	5	1	1

Date	PayCode	In	Out	OR	Reg	OT-1	OT-2	LOT
Mon 04/19/2004	0[MCHR]	8:00AM	4:00PM	*	8.00	0.00	0.00	
Tue 04/20/2004	0[MCHR]	8:00AM	4:00PM	*	8.00	0.00	0.00	
Wed 04/21/2004	0[MCHR]	8:00AM	4:00PM	*	8.00	0.00	0.00	
Thu 04/22/2004	0[MCHR]	8:00AM	4:00PM	*	8.00	0.00	0.00	
Fri 04/23/2004	2[VACA]				8.00	0.00	0.00	

Pay Code	Req Hrs	OT-1	OT-2	Total Hrs	Earnings	Deductions	Reg Pay	OT-1 Pay	OT-2 Pay	Total Pay
0[MCHR]	32.00	0	0	32.00	\$0.00	\$0.00	\$272.00	\$0.00	\$0.00	\$272.00
2[VACA]	8.00	0	0	8.00	\$0.00	\$0.00	\$68.00	\$0.00	\$0.00	\$68.00

Code	Pay Code	Last Post Date	Post Type	Accrued/Used	Available	Notes
1	2[VACA]	02/01/2004	S	12.00	104.00	System Accrual Hours

**STREAMLINING THE  
TIME & ATTENDANCE PROCESS**



## EXECUTIVE OVERVIEW

### NOVATIME 3000 ENTERPRISE SOLUTION

NOVAtime Technology, Inc. provides an enterprise time and attendance solution that reduces labor costs, increases productivity, and improves employee satisfaction by synchronizing labor data for your employees, management, and H.R./Payroll departments. The cornerstone of the system lies with *Web Services*. NOVAtime 3000 Web Services provides, 1) employees with direct Internet access to relevant information, such as work schedules, time off request, attendance and benefit accrual information; 2) supervisors with timely information to better manage their staff and departmental labor costs; and 3) System Administrators with the ability to coordinate system access and security anytime and from anywhere.

The NOVAtime 3000 Enterprise Edition truly supports a nationwide workforce allowing your employees to clock in and out in California, Florida and Minnesota and have time sheet data available to management almost immediately at your corporate offices and all remote locations. The web application promotes the *decentralized* day-to-day management of employee time and labor distribution by your Supervisors and the *centralized* processing of payroll by your Payroll Coordinator.

For scalability and ease in deployment, NOVAtime 3000 separates the time and attendance application into layers that isolate each major area of functionality via its multi-tiered design. The web portion keeps installation simple allowing IT the ability to install the system at a central location and simply email the appropriate link to sister locations for full deployment. You no longer have to load and distribute your time and attendance application on every single desktop across the company! The cost savings for this alone could be tremendous if you have many workstations in your company or if your company has many remote locations.

The NOVAtime 3000 system was developed with the end user in mind and therefore effectively addresses the basics of Time & Attendance as well as the complexities of a working environment with solutions like Job Costing, Labor Tracking, Piece Work, WIP (Work Station Identification of Job Orders) and many others. NOVAtime continuously seeks to bring additional solutions to the package in hopes of addressing real world time and attendance needs.

Finally, the NOVAtime 3000 Enterprise Time & Attendance system helps the company analyze overall performance to support intelligent strategic decision-making by placing a broad range of performance and labor cost evaluation reports right at your fingertips!

**Overview**

NOVAtime 3000 Enterprise is the most powerful, versatile, easy-to-use, and comprehensive time-management, time-attendance, job and labor costing software package available in the market today.

NOVAtime 3000 Enterprise provides the cutting edge technology to help large size corporations manage their payroll and human resource needs.

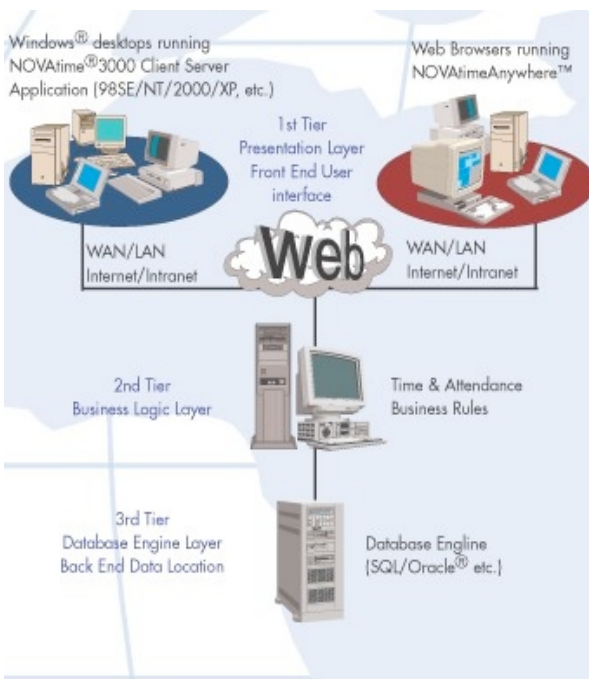
NOVAtime 3000 Enterprise consists of two major elements:

1. **Client Server Application:** a program installed at each workstation, which utilizes an enterprise database management system (DBMS) such as Microsoft SQL Server 2000.
2. **NOVAtimeAnywhere Web Services:** a suite of aspx web components loaded in a web server such as Microsoft IIS, which can be accessed from any workstation over an Intranet or the Internet using a standard browser such as Internet Explorer or Netscape Navigator.

**Technology**

Following Microsoft's strategic initiative for n-tier computing, NOVAtime 3000 Enterprise Edition is the only time and attendance system utilizing 3-tier web-enabled object-based technology.

The NOVAtime framework architecture logically divides computing tasks across the application. These tasks are grouped into three tiers:



**1st Tier - Client/Presentation Layer:** Provides all users an interface to perform their routine functions. Through this top most layer, the user can input data, and view the results of requests.

**2nd Tier - Business Logic Layer or Middle Tier:** Encapsulates all the time and attendance business rules, which applies the company policy and performs standard daily business tasks.

**3rd Tier - Database Engine Layer or Third Tier:** Utilizes all the database access via a database management system (DBMS) such as Microsoft SQL Server database, Oracle, or other DBMS to process and store queries from users.

NOVAtime 3000 Enterprise Edition utilizes SQL (Structure Query Language) technology to insert, retrieve, update, and delete data in the database, providing greater, flexibility, integration and performance over a WAN (wide area network).

NOVAtime 3000 Enterprise Edition uses Microsoft SQL 7.0/2000 as its primary database, although it can be expanded to work with other DBMS (database management systems) such as Oracle, MS Access, DB2, Informix, Sybase and many others. Microsoft SQL Server 2000 ensures uptime and advanced management and tuning functionality to automate routine tasks and lower total cost of ownership.



NOVAtime 3000 Enterprise Edition component blocks are fully XML (eXtensible Markup Language) implemented. A markup language is a mechanism used to identify structures in commonly shared data, providing some indication of what role such information has. XML are sets of rules or standards to use markup language.

NOVAtime 3000 Enterprise Edition is easy to install and distribute and administer across any computer network, whether in a centralized LAN (local area network) or over a WAN (wide area network) because it is fully Microsoft .NET implemented... all you need is a web browser!

Microsoft .NET is a set of Microsoft software technologies for connecting your world of information, people, systems, and devices, using the XML standard, enabling an unprecedented level of software integration through the use of XML Web services: units of code that allow programs written in different programming languages and on different platforms to communicate and share data through standard Internet protocols.

The benefit of .NET to individuals is a seamless/compelling information sharing experience, from accelerating and improving daily operations to providing advanced capabilities for deploying next-generation technologies. Microsoft .NET can help companies connect diverse operating systems, devices, businesses, and individual users more broadly than ever before!

### **Client Server Application**

The CSA (Client Server Application) is the desktop application of NOVAtime 3000 Enterprise Edition. It provides high performance / fast access through a network (either LAN or WAN) thanks to the use of SQL technology, and it embraces all user functions available in the software.

The CSA is required in order to configure all policy rules pertaining calculation of the employee hours including shift or schedules times, rounding rules, overtime calculation, meal deductions, as well as to create and execute automatic procedures at predefined times, collect time clocks data, process payroll, and export data. The CSA can be used by itself or in conjunction with the NOVAtimeAnywhere web enabled services for greater connectivity.

### **NOVAtimeAnywhere**

Thanks to the use of XML Web Services, NOVAtime 3000 Enterprise Edition features NOVAtimeAnywhere, a web-enabled time and attendance solution accessible over the Internet or corporate intranet using a standard web browser, without the need to install any workstation software and facilitating access from outside your corporate firewall (uses standard port 80).

NOVAtimeAnywhere offers three key components to allow individuals to access the information they need while at home, in the office or on the road!

- 1. Employee Web Services (EWS)**
- 2. Supervisor Web Services (SWS)**
- 3. Administrator Web Services (AWS)**

Access rights, features and functions in the EWS and the SWS can be assigned or restricted by individual to accommodate their access privileges to your company requirements. These access rights can be managed by an Administrator from anywhere in the network using the AWS.



### Employee Web Services (EWS)

EWS can be configured to allow employees to access any of the following functions:

- Punch IN or punch OUT from their PC via an intranet or over the Internet
- Review their timesheets.
- Edit their timesheets.
- Submit their timesheets for payment.
- View actual hours summarized by pay codes.
- View actual work hours with IN/OUT time.
- View earnings and deductions.
- View week/pay period total hours.
- View complete attendance history - weekly, monthly and yearly.
- View Accrual balances - vacation, sick, personal time off, or any other benefit hours.
- Request leave time - vacation, jury duty, family leave, personal, etc.
- View their personal profile.
- View their assigned work schedule.
- Update their personal profile.
- Customize and save their own EWS user preferences.

TimeAnywhere - Microsoft Internet Explorer  
 File Edit View Favorites Tools Help  
 Address: http://localhost/timeanywhere/timeanywhere.aspx  
 Wednesday, April 21, 2004 3:18:25 PM  
 Home ? Help Log Off  
 Employee ID: 9001  
 Name: DANA JONES  
 Attendance Scheduler WP  
 Timesheet Schedule Accrual History My Profile  
 Calendar Detail Summary  
 2004  
 January 2004  

Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 28	29	30	31	1	2	3	
Week 4	5	6	7	8	9	10	
Week 11	12	13	14	15	16	17	
Week 18	19	20	21	22	23	24	
Week 25	26	27	28	29	30	31	
Week 1	2	3	4	5	6	7	

 February 2004  

Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 25	26	27	28	29	30	31	
Week 1	2	3	4	5	6	7	
Week 8	9	10	11	12	13	14	
Week 15	16	17	18	19	20	21	
Week 22	23	24	25	26	27	28	
Week 29	1	2	3	4	5	6	

 March 2004  

Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 29	1	2	3	4	5	6	
Week 7	8	9	10	11	12	13	
Week 14	15	16	17	18	19	20	
Week 21	22	23	24	25	26	27	
Week 28	29	30	31	1	2	3	
Week 4	5	6	7	8	9	10	

 April 2004  

Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 28	29	30	31	1	2	3	
Week 4	5	6	7	8	9	10	
Week 11	12	13	14	15	16	17	
Week 18	19	20	21	22	23	24	
Week 25	26	27	28	29	30	1	
Week 2	3	4	5	6	7	8	

 May 2004  

Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 25	26	27	28	29	30	1	
Week 2	3	4	5	6	7	8	
Week 9	10	11	12	13	14	15	
Week 16	17	18	19	20	21	22	
Week 23	24	25	26	27	28	29	
Week 30	31	1	2	3	4	5	

 June 2004  

Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 30	31	1	2	3	4	5	
Week 6	7	8	9	10	11	12	
Week 13	14	15	16	17	18	19	
Week 20	21	22	23	24	25	26	
Week 27	28	29	30	1	2	3	
Week 4	5	6	7	8	9	10	

 July 2004  

Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 27	28	29	30	1	2	3	
Week 4	5	6	7	8	9	10	
Week 11	12	13	14	15	16	17	
Week 18	19	20	21	22	23	24	
Week 25	26	27	28	29	30	31	
Week 1	2	3	4	5	6	7	

 August 2004  

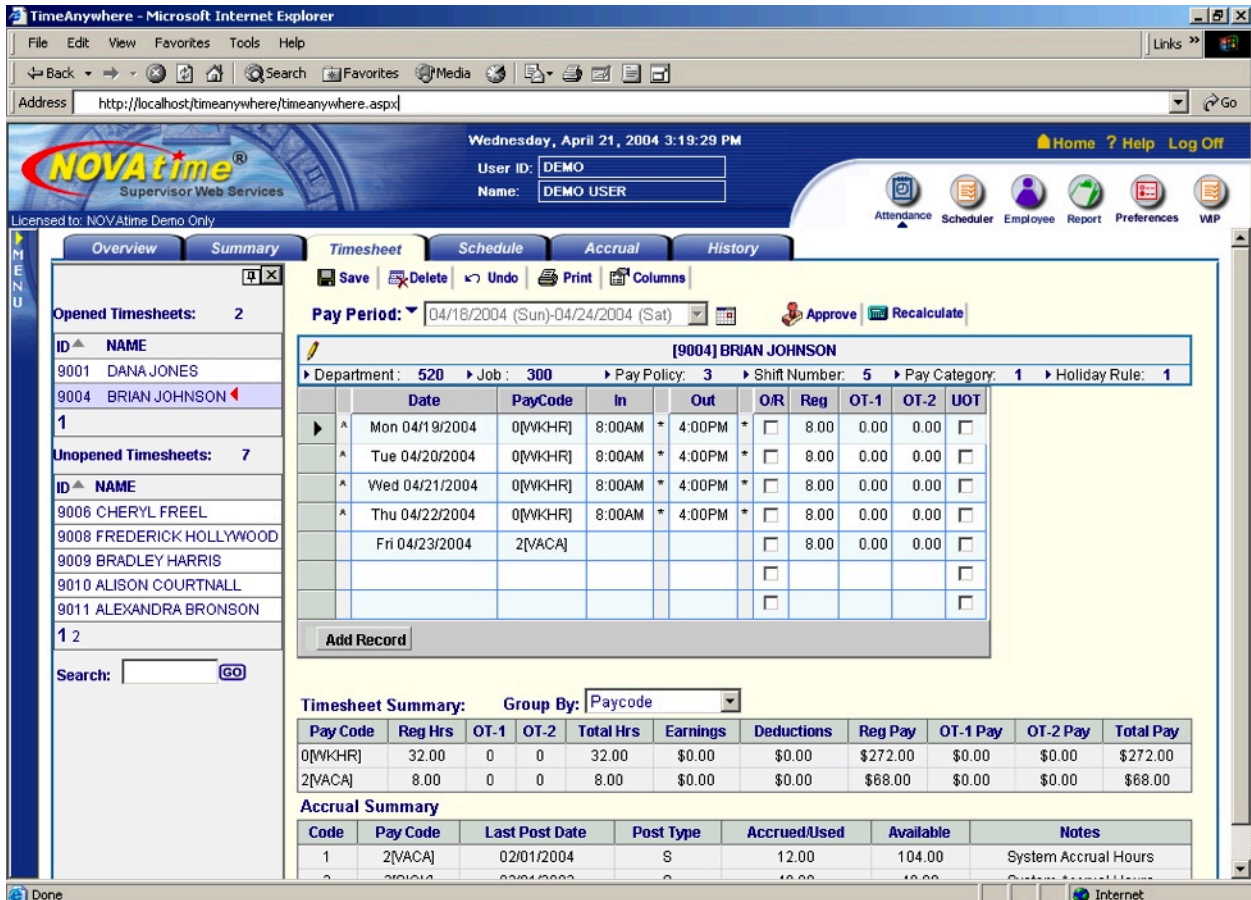
Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 25	26	27	28	29	30	31	
Week 1	2	3	4	5	6	7	
Week 8	9	10	11	12	13	14	
Week 15	16	17	18	19	20	21	
Week 22	23	24	25	26	27	28	
Week 29	30	31	1	2	3	4	

 September 2004  

Week	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 29	30	31	1	2	3	4	
Week 5	6	7	8	9	10	11	
Week 12	13	14	15	16	17	18	
Week 19	20	21	22	23	24	25	
Week 26	27	28	29	30	1	2	
Week 3	4	5	6	7	8	9	

 Internet

- **Supervisor Web Services (SWS)**  
SWS can be configured to allow supervisors to access take control on administrative tasks such as: Review and update their employee's information based on summarized exceptions
- Entries such as date, pay code, IN time, OUT time, earnings, deductions, group information, etc.
- Review summary information, such as total regular hours, OT1, OT2, as well as regular pay amount, OT1 pay amount, OT2 pay amount, and total pay period pay amount.
- Review accrual summary, such as number of available and used vacation hours, and number of available and used sick hours, etc.
- Timesheet status: Submitted and Approved.
- View and maintain their employees' work schedules
- Enter new schedules.
- View current and past work schedules: schedule summary based on total work hours for each day of the week or schedule summary based on total scheduled hours, total available hours, and unscheduled hours.
- View their employee's accrual information
- Summary by pay code.
- Actual usage details and number of hours available for each pay code.
- View their employees' timesheet history
- Various time periods available: current quarter, recent 6 months, and year to date or custom date selection.
- View by pay code and day of the week: number of occurrences or hours.



**NOVAtime**  
Supervisor Web Services

Wednesday, April 21, 2004 3:19:29 PM  
User ID: DEMO  
Name: DEMO USER

Attendance Scheduler Employee Report Preferences WIP

Overview Summary **Timesheet** Schedule Accrual History

Save Delete Undo Print Columns

Pay Period: 04/18/2004 (Sun)-04/24/2004 (Sat) Approve Recalculate

[9004] BRIAN JOHNSON  
Department: 520 Job: 300 Pay Policy: 3 Shift Number: 5 Pay Category: 1 Holiday Rule: 1

	Date	PayCode	In	Out	O/R	Reg	OT-1	OT-2	UOT
A	Mon 04/19/2004	0[WKHR]	8:00AM	4:00PM	*	8.00	0.00	0.00	0.00
A	Tue 04/20/2004	0[WKHR]	8:00AM	4:00PM	*	8.00	0.00	0.00	0.00
A	Wed 04/21/2004	0[WKHR]	8:00AM	4:00PM	*	8.00	0.00	0.00	0.00
A	Thu 04/22/2004	0[WKHR]	8:00AM	4:00PM	*	8.00	0.00	0.00	0.00
	Fri 04/23/2004	2[VACA]				8.00	0.00	0.00	0.00

Add Record

Timesheet Summary: Group By: Paycode

Pay Code	Reg Hrs	OT-1	OT-2	Total Hrs	Earnings	Deductions	Reg Pay	OT-1 Pay	OT-2 Pay	Total Pay
0[WKHR]	32.00	0	0	32.00	\$0.00	\$0.00	\$272.00	\$0.00	\$0.00	\$272.00
2[VACA]	8.00	0	0	8.00	\$0.00	\$0.00	\$68.00	\$0.00	\$0.00	\$68.00

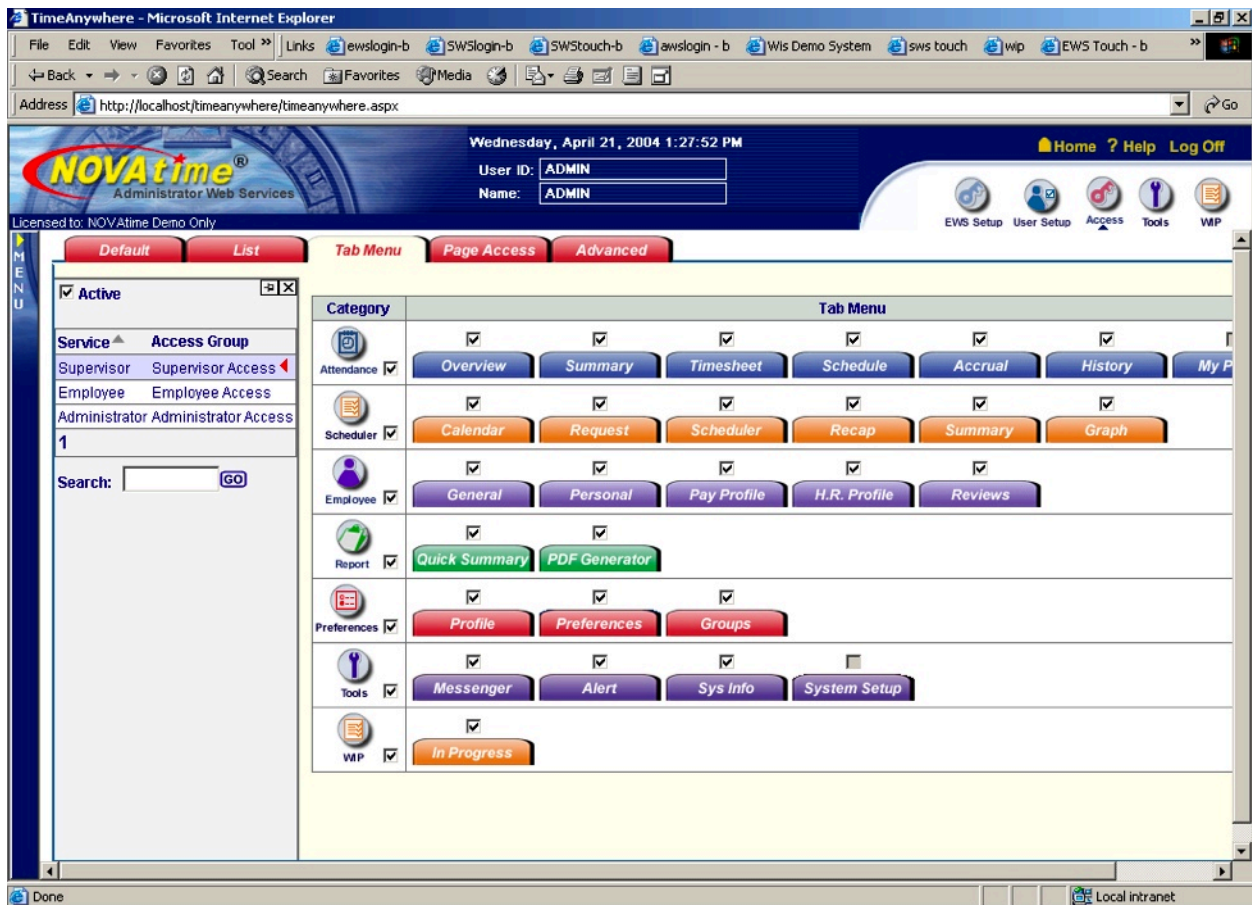
Accrual Summary

Code	Pay Code	Last Post Date	Post Type	Accrued/Used	Available	Notes
1	2[VACA]	02/01/2004	S	12.00	104.00	System Accrual Hours

### Administrator Web Services (AWS)

AWS allows your organization to efficiently deploy/maintain access rights, features and functions for the EWS and the SWS throughout your facilities - locally or remotely. Administrators can:

- Setup and deploy access privileges for each individual user or group of users (i.e. full access, read only, or no access) to different screens, as well as to configure access authority to pay codes, pay periods, etc.
- Restrict employee and supervisor access to specific IP addresses.
- Assign employees to supervisors.
- Setup an automated e-mail alert for unauthorized access attempt of an employee or a supervisor account.
- Generate auto task routines.



The screenshot displays the NOVAtime Administrator Web Services interface. At the top, the browser window shows the URL 'http://localhost/timeanywhere/timeanywhere.aspx'. The page header includes the NOVAtime logo, the text 'Administrator Web Services', the date 'Wednesday, April 21, 2004 1:27:52 PM', and user information 'User ID: ADMIN' and 'Name: ADMIN'. There are navigation tabs for 'Default', 'List', 'Tab Menu', 'Page Access', and 'Advanced'. The main content area is titled 'Tab Menu' and contains a grid of buttons for various functions, each with a checkbox. The functions are organized into categories: Attendance (Overview, Summary, Timesheet, Schedule, Accrual, History, My P), Scheduler (Calendar, Request, Scheduler, Recap, Summary, Graph), Employee (General, Personal, Pay Profile, H.R. Profile, Reviews), Report (Quick Summary, PDF Generator), Preferences (Profile, Preferences, Groups), Tools (Messenger, Alert, Sys Info, System Setup), and WIP (In Progress). A sidebar on the left shows a tree view with 'Active' checked, and a search box.



### **Standard Features**

- Exclusive System Navigator to guide users through common procedures and system setup and administration.
- Strong Policy Setup can manage even the most complex calculation rules.
- Up to 8 levels of group transfers (facility, department, job) for efficient job costing.
- Unlimited pay policies can be configured to manage individual calculation rules for groups of employees.
- Unlimited shifts can be set for different groups of employees.
- Auto-task to automate common operations including data collection and report generation.
- Strong SQL report engine to generate reports for processing payroll and to assist management with labor distribution and job costing.
- Exclusive time sheet management approval feature to prevent payroll processing of non-reviewed timecards.
- Fully implemented via OPP (Object Oriented Programming) using UML (Unified Modeling Language) framework, to easily adapt to changes and facilitate growth.
- IN/OUT Board to display employee current IN/OUT status.
- Custom active employee software capacity.
- NOVAtimeAnywhere is compatible with most Internet web browsers such as Internet Explorer and Netscape Navigator. Pure 100% HTML and JavaScript - no need to install custom Java applets or ActiveX plug-ins.
- Web browser interface can run under Windows, Macintosh, Unix or any other platform with a compatible web browser.

### **Special Features**

- Accruals module to accrue even the most complex benefit hours, such as vacation and sick time.
- PC Key-In module to allow employees to punch from their PC over a Windows compatible LAN or WAN.
- Lockout module to prevent early punch IN or late punch OUT, reducing unauthorized overtime.
- NOVApic module to easily create and print your own badges (badge printer sold separately).
- NOVApoin module to automatically track points based on employees' attendance performance (good or bad) and generate letter for employees with 'qualified' number of points.
- Custom Report Maker module to create your own reports containing only the information you need in the format you want.
- Additional Software modules can be added at any time to expand your system as your company grows.



## **NOVAtime®3000 Enterprise for Microsoft® SQL Server:**

### **Minimum Client workstation Requirements : (NOVAtime3000 Client)**

- Intel Pentium II 200 MHZ or higher (Recommended PIII 500MHZ)
- Microsoft® Windows 98SE/NT/2000/XP professional
- 128 MB RAM (Recommended 256 MB RAM or above)
- Hard disk space requirement:
- NOVAtime® 3000 Enterprise Client Software 60 MB
- CD-ROM drive
- Super VGA monitor (800x600)
- Microsoft mouse or compatible pointing device

### **Minimum Web Client workstation Requirements : (NOVAtimeAnywhere Web Client)**

- Any platform utilizing web browsers, such as Microsoft® Windows® 98SE/NT/2000/XP professional, Unix or Macintosh.
- Microsoft® Internet Explorer 5.5 or higher or Netscape® 7.0 or higher
- Super VGA monitor (1024x768)
- Microsoft® mouse or compatible pointing device

### **Minimum Server Requirements :**

- Intel Pentium III 500 MHZ or higher (Recommended P4 2G MHZ)
- Single processor (Dual processors if more than 20 users access at the same time)
- Microsoft® Windows 2000/2003 server
- If more than 500 employees: Microsoft® SQL 7.0 or higher
- If less than 500 employees: Microsoft® SQL Express (NOVAtime installation will install SQL Express if it is not already installed.)
- Microsoft® Internet Information Server (For NOVAtimeAnywhere® web access)
- Microsoft® .NET Framework (For NOVAtimeAnywhere® web access), NOVAtime installation program will install Microsoft® .NET Framework, if PC does not have installed. Note: Standard for Windows® XP OS.
- 1GB RAM (Recommended 2 GB RAM or above)
- Hard disk space requirement:
  - NOVAtime® 3000 Enterprise Data and .NET web program 100 MB minimum
- CD-ROM drive
- Super VGA monitor
- Microsoft® mouse or compatible pointing device