

# KRONOS WORKFORCE TELESTAFF

How to Meet the Unique Scheduling Needs of Fire and EMS Operations

## **WHEN IT COMES TO SCHEDULING AND STAFFING FIRST RESPONDERS, MANUAL, PAPER-BASED SYSTEMS JUST CAN'T GET THE JOB DONE.**

Beyond wasting time and energy, they contribute to negative consequences for the entire organization: inaccurate schedules, compliance violations, communication obstacles, and more.

## **► ENTER KRONOS WORKFORCE TELESTAFF.**

Kronos® Workforce TeleStaff™ is an automated public safety scheduling solution that's part of the Kronos Workforce Central® suite, our comprehensive workforce management platform. A time-tested, proven scheduling solution, Workforce TeleStaff optimizes the scheduling, communications, and deployment of Fire and EMS employees.

All of this leads to results that matter most: improved workforce productivity, controlled labor costs, and better compliance with union rules, labor laws, and other department policies. One solution, many benefits. That's Workforce TeleStaff.

# FOUR REASONS

## You Need Kronos Workforce TeleStaff

**CONTROL LABOR COSTS** | Complex overtime policies. Frustrated employees. Unnecessarily high overtime costs. We all know the outcomes of overtime management “gone wrong,” but up until now, Fire and EMS departments were hard pressed to prevent them.

Think again. Now you can solve all the traditional overtime challenges by automating the overtime-distribution process. Take advantage of a single solution for appropriately assigning, granting, or denying overtime by applying your own overtime rules. This is critical for managing eligibility, adhering to staffing rules, improving employee morale, and containing overtime costs.

**MINIMIZE COMPLIANCE RISK** | If you’re looking to improve your scheduling and communications processes to become more compliant, we’re ready to help. With a proven, powerful scheduling solution built specifically for Fire and EMS operations, you’ll successfully automate manual scheduling processes. It’s a win-win: Not only will you create schedules that balance demand with employee availability, but you will also improve your overall compliance effort.

**IMPROVE LABOR PRODUCTIVITY** | Let your staffing supervisors stop playing auctioneer in the bid process and get back to what’s really important — protecting and serving the public. Now you can empower employees to bid on or choose shifts, positions, or vacation time to create a more flexible staffing environment. And you can help supervisors spend less time on facilitating manual bids — and more time on high-priority activities, such as training personnel and managing day-to-day operations.

**OPEN THE LINES OF COMMUNICATION** | A reliable notification system is a necessity, not a nice-to-have. The need for rapid and accurate communications to Fire and EMS personnel has escalated to new levels in recent years. With man-made and natural disasters on the rise and a heightened focus on homeland security, Fire and EMS personnel must be easily and quickly located, notified, and deployed using reliable methods.

The right notification system is essential during times of crisis, but the use of it to accomplish daily staffing tasks relieves administrative burdens while increasing efficiency.

# CONTROL LABOR COSTS

Manage Overtime Fairly and Accurately

“(Workforce) TeleStaff has saved Redondo Beach Fire Department an untold number of work hours administering our overtime system. It has further saved time, resources, and costs that may have been wasted on an inferior staffing solution.”

**Captain Scott Harper,**  
Redondo Beach Fire  
Department

Now you can allocate overtime equitably within a controlled, automated environment to create fair and impartial schedules that increase employee morale, control labor costs, and better comply with regulatory requirements.

**Be fair** | With Workforce TeleStaff, you can create fair and equitable distribution of overtime to help ensure employee satisfaction and avoid grievances.

**Avoid overtime controversy** | You can also provide overtime staffing lists sorted by any number of entitlement variables, such as seniority or number of overtime hours worked.

**Measure usage** | For total management insight, you can track and report on overtime by employee, number of hours, cost, type, reason, and percentage of type over any time period, and at any organizational level.



# MINIMIZE COMPLIANCE RISK

Right Employees, Right Time

**"(Workforce) TeleStaff has reduced the scheduling nightmare for the department! It is easy to use and every member has access to their own schedule while following the department rules and union contract."**

**Fire Chief**  
**James Jackson,**  
Downers Grove Fire  
Department

Automate manual, paper-based scheduling processes to produce the most effective schedules possible — schedules that reduce overstaffing and administrative costs.

**Produce effective schedules** | Not only can you perform roster check-in for roll call, you can also create and maintain a virtually unlimited number of schedules supporting multiple shifts, rotating positions, future assignments, and promotions. With advanced staffing functionality, Workforce TeleStaff makes decisions based on your unique scheduling rules.

**Simplify compliance** | Align scheduling demands with employee availability and qualifications while helping to ensure compliance with federal and state labor laws, union mandates, and organizational policies.

**Find and notify the right employees — all in one step** | Now you can identify off-duty or "can-act-as" employees to backfill vacancies and generate schedule-driven notifications such as assignment changes, extra-duty detail, and certification expirations. Even better, you can notify employees in the way they prefer — telephone, email, mobile device, tablet, computer, or pager — for immediate response.

## Whenever-Wherever 100% Web-Based Access

Workforce TeleStaff gives your workforce easy, convenient Web access to schedules and related work tasks:

### EMPLOYEES



- Access schedules
- Review work notifications
- Sign up for overtime/extra-duty work
- Submit time-off requests

### STAFFERS



- Manage the roster and fill vacancies
- Approve requests and overtime
- View employee certifications
- Initiate emergency recall
- Access reports

# IMPROVE WORKFORCE PRODUCTIVITY

Automated Bidding Frees Up Time

"Auctions helps us with the challenge of scheduling vacation and work back (debit) days in a fair and equitable manner. Our past practice pulled companies out of their response areas to schedule their vacation. Auctions allows companies to stay in their response areas and schedule their vacation and work back (debit) days."

**Battalion Chief**  
**Rick Ashleman,**  
Shoreline Fire  
Department

With Workforce TeleStaff, you can successfully automate all the processes related to position, shift, and vacation bidding. It truly is a win-win scenario: You'll free supervisors' time while giving employees more control over their schedules.

**Save time and achieve more** | Reduce excessive amounts of time and resources spent on conducting recurring bidding processes for shifts, positions, vacations, and guaranteed leave.

**Reward employees** | When you give employees more control over their schedules and insight into how bids are fairly awarded, your organization will see increases in employee morale, satisfaction, and even productivity.

**Minimize risk** | By centralizing the bidding process into a single system and providing a secure auction environment, you will mitigate your liability risk for noncompliance.

## Detailed Reporting at Your Fingertips

Workforce TeleStaff delivers real-time reports and rosters to help you analyze and make informed decisions about workforce issues:

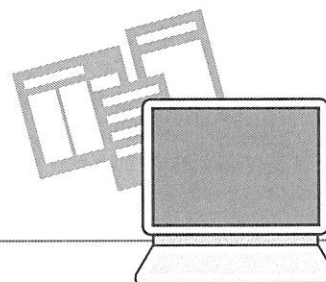
Costs associated with working  
and nonworking codes

Expiration/certification warnings

Exceptions

Payroll

Daily staffing status



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**GAIN VISIBILITY INTO THE  
METRICS THAT MATTER.**

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# OPEN LINES OF COMMUNICATION

Locate, Notify, Deploy

**"We needed to contact all of our personnel to let them know we still had spots that needed to be filled. We sent notifications to 170 firefighters and captains, and we were able to complete that in less than an hour and a half."**

**Captain Jim Swanson,**  
Santa Clara County  
Fire Department

In Fire and EMS operations, it is critical that the right personnel can be easily located, notified, and deployed. Only Workforce TeleStaff can deliver.

**Make sure your message is heard** | Workforce TeleStaff lets you provide staffing information by telephone, email, mobile device, tablet, or pager.

**Identify correct employees** | In order to communicate with your workforce, a scheduling solution must first identify the "correct" employee to contact. Where other scheduling solutions may use seniority or other basic rules, Workforce TeleStaff allows limitless rules creation to identify the correct employee for any situation.

**Gain true insight** | Combined with sophisticated auditing and tracking tools, Workforce TeleStaff lets you know who received the message using what communication method and how they responded. No more arguments about whether the correct employee was notified — Workforce TeleStaff gives you a full audit trail of activities.

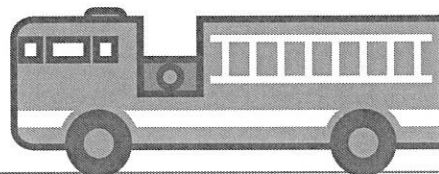
## Empower Employees with Self-Service Access

Workforce TeleStaff delivers comprehensive self-service functionality that streamlines lengthy approval processes:

EXPEDITE scheduling tasks

REDUCE paper processing

IMPROVE employee morale



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**FOCUS ON THE REAL WORK AT HAND.**

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Kronos is the global leader in delivering workforce management solutions in the cloud. Tens of thousands of organizations in more than 100 countries — including over 2,000 government agencies — use Kronos to control labor costs, minimize compliance risk, and improve workforce productivity. Learn more about Kronos industry-specific time and attendance, scheduling, absence management, HR and payroll, hiring, and labor analytics applications at [www.kronos.com](http://www.kronos.com). **Kronos: Workforce Innovation That Works™**.

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Put Kronos Workforce TeleStaff to work for you:

+1 800 850 7374 | [kronos.com/workforcetelestaff](http://kronos.com/workforcetelestaff)

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# KRONOS WORKFORCE TELESTAFF FEATURES AND BENEFITS

Optimized Scheduling, Deployment,  
and Communication.

That's Kronos Workforce TeleStaff.

Every mission starts with finding, qualifying, contacting, and deploying first responders and other critical resources. And manual, paper-based systems won't get the job done. They waste valuable time, energy, and money. Contribute to compliance risks. And hinder reliable and accurate communications. But with Kronos® Workforce TeleStaff™, these problems are a thing of the past.

Workforce TeleStaff pairs rules-based scheduling with communication capabilities to optimize on-scene arrival. Whether it is staffing the daily roster, deploying for a major disaster, coordinating off-duty work, or managing employee time, Workforce TeleStaff is uniquely designed to deliver. With this time-tested solution, you gain workforce scheduling features unlike any other vendor offering in the public safety and utilities markets.

## Key Benefits

- > **CONTROL** labor costs
- > **MINIMIZE** compliance risk
- > **IMPROVE** workforce productivity
- > **OPEN** the lines of communication

Features	Benefits
<b>Scheduling/Roster</b>	
Pre-builds schedules and rosters	Makes creating schedules and rosters based on shift requirements quick and easy
Delivers comprehensive employee scheduling	Empowers managers to effortlessly staff employees to positions and shifts, even in the most complex scheduling environments
Provides a real-time daily roster	Displays in real time who is working a regular-duty shift (plus any working or nonworking exceptions, such as overtime, training, sick leave, vacation, etc.), and provides an at-a-glance view of employee qualifications and certifications
Supports many organization levels	Maintains all organizational scheduling data within a single solution, leading to greater collaboration among departments and increased productivity across the entire organization
Tracks employee certifications and qualifications	Helps managers track necessary data for proper staffing and helps ensure compliance
Automatically generates staffing alarms when staffing levels fall below requirements	Helps ensure that proper coverage is maintained
Offers a multi-user solution	Supports an unlimited number of users and can assign permission and security levels for individuals or groups
100% web-based solution	Provides employees and managers full functionality access to their schedules and the ability to expedite work tasks
Employs a patented rules-based staffing engine	Automates the most complicated scheduling rules, saving significant time and effort

Features	Benefits
Relays scheduling communications automatically	Saves valuable time for managers by generating schedule-driven notifications to employees (who can be prompted to respond) by telephone, email, mobile device, tablet, pager, intranet, and internet
Supports different union or business rules for various departments, groups, or scenarios	Helps ensure scheduling compliance while offering the utmost flexibility
Validates staffing decisions against rules	Consistently applies rules when scheduling employees, granting leave, or processing time-off requests, helping ensure compliance
Supports multiple shifts, rotating posts, positions, future assignments, and promotions	Allows staffing personnel and employees to view current and future schedules based on shift or assignment changes that will occur
Allows employees to indicate the days, shifts, or events for which they are available to work extra-duty assignments	Simplifies staffing extra-duty work and assignments by allowing employees greater control over their schedules while improving morale
Automatically assigns shifts and staffs employees for work	Saves valuable time helping managers assign shifts, automatically considering availability, skills, time off, and more
Allows employees to submit time-off requests via telephone, email, mobile device, tablet, intranet, and internet	Streamlines the workflow for employee requests and approvals based on policies and business culture, and saves employees and managers countless hours by automating requests and approvals while enforcing policies and rules
Finds and contacts employees to fulfill staffing needs	Virtually eliminates manual outbound staff scheduling calls and allows for concurrent calls to be conducted
Offers real-time view of past, present, and future scheduling data and other relevant staffing details	Allows users access to the most up-to-date scheduling data at all times throughout the day
Schedules employees to secondary employment	Offers a full view of the organization's staffing at all times for planned and unplanned event staffing
Displays schedules by employee, department, shift, day, week, month, and year and into the future	Flexible roster views make it easy to access necessary specific staffing data fast
Identifies and avoids overstaffing	Eliminates costly scheduling errors
Supports "can act as" staffing	Saves costs by staffing positions with personnel who have multiple abilities
Manages shift, assignment, and vacation bid processes*	Eliminates manual bid processes and helps employees balance work and personal life priorities, as they have more control over their work and vacation schedules
Offers a fast-find capability for people and groups	Easily locates specific employees or groups in just a few clicks
Provides drag-and-drop capabilities	Easily moves employees and reassigns shifts instantly
Maintains in-depth employee profiles	Keeps data such as ID, shift, contact methods, pay rate, seniority, attributes, DOB, and much more on each employee record
Mobile compatibility with tablet and smart phones	Gives your workforce access to complete common administrative tasks and allows employees to perform their scheduling management tasks when they need to, where they need to; managers can easily access real-time data and streamline decision making by staying constantly connected

Features	Benefits
Provides roster check-in capabilities for roll call	Allows employees to manually check in from the roster, ensuring an accurate, easy, and secure roll call process
Database consolidation	Allows two or more entities to exist in a single database while keeping each group's people and staffing information separate
Provides compatibility with common international system date formatting DD/MM/YYYY	Allows agencies to use date formatting standard for their country or region, including Australia, Canada, most European countries, and some areas of Asia
Supports multiple time zones	Easily cross schedule or schedule personnel working in different time zones
<b>Notification</b>	
Integrates built-in communication capabilities with scheduling functionality	Eliminates manual phone calls and expedites scheduling of employees, requiring no additional effort by managers
Tracks multiple contact numbers and methods	Offers flexible communication methods for staffing positions and relaying other work information
Makes the right contact based on the situation	Allows for the right staff members to be contacted in the right order and staffed for virtually any situation
Supports bidirectional exchange of information	Allows employees to can accept/deny work and make requests by phone
Sends communications to employees relating to work offers to fill vacancies, emergency recall, assignment changes, and other activities or events	Improves operational effectiveness by automating communications, linking scheduling-driven data, and relaying important messages pertaining to work, helping ensure compliance and appropriate staffing
Allows employees to specify contact methods	Ensures best contact method and receipt of notification
Captures and reports sent notifications and employee responses	Confirms receipt of all outbound messages via a time and date stamp for auditing purposes
Sends custom messages on the fly	Communicates information rapidly to specific groups, employees, or the entire organization by telephone, email, mobile device, tablet, pager, intranet, and internet

Features	Benefits
<b>Overtime</b>	
Automatically assigns overtime positions based on rules, reducing risk of noncompliance	Balances rules, employee schedules, and organizational needs when making overtime staffing decisions
Automatically validates staffing decisions	Consistently applies overtime rules when scheduling employees, granting leave, or processing time-off requests
Identifies who's eligible for overtime	Displays who is off duty, not fatigued, can be held over, or has signed up, ensuring accurate staffing
Creates entitlement lists	Generates lists based on unlimited entitlement variables
Notifies in entitlement order	Offers work fairly and by entitlement rules, helping to ensure compliance
Offers overtime by touch-tone phone, email, text, intranet, and internet	Ensures overtime positions are filled efficiently
Tracks overtime activity	Tracks all overtime actions by employee for audit purposes
Allows employee overtime sign-up	Improves morale by empowering employees; saves time and expedites staffing
Pre-approves or suppresses overtime	Helps control labor costs
Tracks overtime labor hours by work codes	Instantly shows number of hours worked per employee, department, and organization by user-defined work codes
<b>Emergency Response</b>	
Finds and contacts employees by telephone, email, mobile device, tablet, pager, intranet, and internet	Uses multiple communication methods for faster scheduling and deployment
Automatically backfills vacant positions	Maintains staffing levels during emergency response
Supports command-post scheduling via the Web	Manages staff and scheduling at the scene
Allows for custom messaging	Sends instant communications such as incident and situational updates to employees
Tracks hours related to emergency response and pre-populates built-in FEMA reporting module	Expedites reimbursement processes with government agencies, including FEMA, for declared emergencies



Features	Benefits
<b>Tracking of Time and Leave</b>	
Manages complex leave and benefit accruals	Automates functions relating to time tracking, leave, and accruals by delivering an end-to-end manager and employee self-service system that expedites approvals, maintains staffing coverage, and allows organizations to easily measure how time is spent so it can be efficiently managed and justified at all times
Uses unlimited work codes	Manages organization-defined working and nonworking codes such as overtime, vacation, move-ups, shift-differential pay, time trades, and more; accurately tracks codes within a centralized system
Calculates and tracks time balances of unused time, time off, comp time, sick time, vacation, and leave	Easily recognizes absence trends and patterns, and applies rules to decisions regarding time away from work
Incorporates compliance regulations via rules	Maintains compliance with federal and state labor laws, collective bargaining agreements, and other organization policies
Supports unique leave policies	Automatically enforces leave and time-off rules through customer-specific product configuration
Tracks and logs all leave and time-off events	Provides audit trail in event of grievance or audit
Provides employee and manager self-service	Provides access to real-time leave balances, minimizes requests to managers, and increases employee satisfaction
Delivers self-service reporting	Employees have access to their own personal history reports that detail time and accrual bank activity; provides several standard reports
Produces operational labor and cost reports	Displays trends and helps monitor employees' time and leave events as well as where labor costs are spent and why for greater workforce insight
<b>Compliance</b>	
Supports user-defined compliance rules	Incorporates rules associated with collective bargaining agreements, regulations, and policies for enforced compliance
Applies rules when making staffing decisions	Consistently validates staffing decisions against rules when granting leave and processing time-off requests
Creates structured staffing and approval processes	Encourages adherence to a framework of practices for your workforce while defining roles and responsibilities for scheduling decision makers
Tracks every scheduling event	Offers an audit trail showing every transaction within the system

Features	Benefits
<b>Self-Service</b>	
Provides employee self-serve access	Using a telephone, mobile device, tablet, intranet, or internet, employees process requests, review notifications and messages, view schedules, and change profile information based on authority level
Supports configured roles-based security	Allows organizations to define responsibilities for groups and individuals according to hierarchy and user responsibilities
Provides user access by telephone, mobile device, tablet, intranet, and internet	Gives flexible system access points from anywhere, at anytime
Allows employees to sign up for overtime	Enables supervisors to approve or deny in one system; improves employee satisfaction
Allows employees to enter work preferences	Helps employees balance work and personal life priorities, and ensures correct staffing
Allows employees to conduct shift trades	Leverages scheduling tasks and improves employee satisfaction
<b>Deployment</b>	
On-premise	Enables IT departments to install, manage, and maintain their applications
Kronos Private Cloud	Kronos manages all IT-related functions from hosting, installations, and upgrades to backups and load balancing
<b>Integration</b>	
Integrates with third-party CAD and RMS solutions	Transfers roster data automatically or on demand, eliminating redundant data entry and ensuring accuracy
Integrates with third-party HR/payroll solutions	Finalizes pay reports, which can be transferred in dozens of formats to be sent automatically or on demand to payroll systems; accepts data from HR systems, including employee information, accrual balances, certifications, and more, eliminating redundant data entry and reducing errors
Integrates with third-party time and labor management solutions	Populates an organization's time and labor management system automatically or on demand so that punch, swipe, or other login data can be compared against the most current schedule; no-show, overtime, and other relevant data can be accepted from the time and labor system so that attendance data remains synchronized
<b>Services and Support</b>	
Delivers accelerated implementation and deployment	Delivers a uniquely tailored solution within 90 days from project kickoff for a faster return on investment
Provides extensive training services	Offers vendor-hosted, web-based, or on-site training services
Offers 24/7/365 technical support	Provides access to highly trained and dedicated product support specialists around the clock via a toll-free support line

Features	Benefits
<b>Reporting</b>	
Offers extensive labor and management reports	Provides 10 standard reports that analyze a variety of dynamic information relating to labor data and costs for better decision making and in-depth insight into operations
Continually records a database of scheduling activities and events	Captures real-time organizational scheduling data, maintaining a comprehensive archive for auditing purposes
Allows reports to be viewed, shared, printed, or emailed on demand	Gives flexibility in obtaining and viewing reports
Contains FEMA report module	Expedites recovery of reimbursement funds for FEMA-declared emergencies
Provides Custom Reporting module*	Expands reporting capabilities beyond canned reports

\*Automated Bidding and Custom Reporting are add-on modules.



Workforce Innovation  
That Works™

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# KRONOS WORKFORCE TELESTAFF TECHNICAL OVERVIEW

## Built on the Right Architecture for You

Kronos® Workforce TeleStaff™ is a proven automated scheduling solution that organizations rely on to achieve their scheduling and workforce management goals. Part of the Workforce Central® suite, Workforce TeleStaff optimizes the scheduling, communications, and deployment of public safety personnel.

While Workforce TeleStaff is designed to help users improve their scheduling efforts — and results — it is also built on a flexible yet powerful architecture that IT departments will appreciate. With powerful functionality to support vertical and horizontal scalability, failover, clustering, and load balancing, Workforce TeleStaff delivers an effective solution that is easy to install, maintain, and own.

## A Flexible, Powerful Architecture

Workforce TeleStaff is a 100 percent web-based solution that works in any HTML5 enabled web browser. No browser plug-ins or add-ons are required to use the application, which simplifies deployment and support complexities. This flexible architecture allows organizations to segregate system functions across multiple servers, including load balancing, task scheduling, data caching, and database access.

Workforce TeleStaff also supports the most popular databases, including Microsoft SQL Server. Additionally, the interactive voice recognition (IVR) component of Workforce TeleStaff uses the Voxeo Prophecy platform in either an on-premise or cloud deployment.

## Maximum Uptime and Performance

To provide high availability and scalability for maximum uptime and application performance, Workforce TeleStaff permits application servers to be replicated or load-balanced across multiple hosts. The 64-bit architecture enables the full use of memory beyond the 32-bit restrictions so organizations can scale up and/or out, depending on their specific requirements. The architecture of Workforce TeleStaff also supports the delivery of multiple versions of the application on a single platform.

Workforce TeleStaff is predominantly a database-read solution where logic is performed at the application level, which keeps database utilization as low as possible for increased application speed and performance. While the application is a proprietary solution, the database is not, a distinction that enables organizations to maintain their own database and access data using standard SQL queries.

## Key Benefits

- > **PROVIDES** a flexible yet powerful architecture
- > **MEETS** IT's requirements for a highly available and easy-to-maintain application
- > **SUPPORTS** vertical and horizontal scalability, failover, clustering, and load balancing
- > **HELPS** optimize the scheduling, communications, and deployment of public safety personnel



## Multi-Tiered Architecture

Workforce TeleStaff solutions are designed using a multi-tiered application architecture that supports rapid deployment and effective integration of the application within a customer's existing IT infrastructure.

**Client:** In the client, users access the system via a standard HTML browser. No plug-ins or add-ons are required for system access.

**Application:** The application contains the following key components:

- The Web Server, which contains the static content and serves browser requests that are passed to Workforce TeleStaff
- The Java Application Server, which executes the application logic and displays the dynamic content
- The Messaging Server, which integrates application components and provides the backbone for scalability
- The Caching Server, which optimizes response times by maintaining frequently used information to support high availability and reduce database queries

**Database:** Within the database, the database server efficiently stores and retrieves all application data. The user's specific database configuration is based on several variables, including the number of employee records, the number of clients, and the configuration of the storage subsystem.

## Security

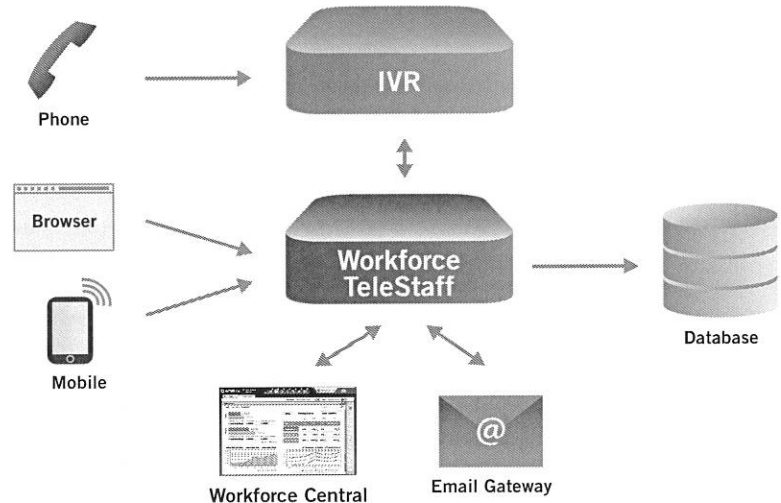
Kronos recognizes the importance of safeguarding the information in the workforce management solution. Workforce TeleStaff supports LDAP and Active Domain registries for password authentication and centralized password management. SSL communication is required.

Workforce TeleStaff enforces the concept of "no privileges until assigned," which means that users cannot access system data or functions until access is explicitly granted to them. User access rights are defined in Workforce TeleStaff access control profiles.

Authentication	Authorization
<ul style="list-style-type: none"> <li>• Authentication identifies users based on factors such as user name and password</li> </ul>	<ul style="list-style-type: none"> <li>• Once a user is identified, the authorization function creates a user session containing privileges provided by role-based profile assignments</li> </ul>
<ul style="list-style-type: none"> <li>• The authentication function supports LDAP, Active Directory, and the Workforce TeleStaff database</li> </ul>	<ul style="list-style-type: none"> <li>• Profiles manage data access, including which employees a specific user can access and the types of data and editing available</li> </ul>
<ul style="list-style-type: none"> <li>• Each user can be configured with a different authentication authority</li> </ul>	<ul style="list-style-type: none"> <li>• The user's navigation is automatically generated based on his or her access privileges</li> </ul>

## High-Level Overview of Workforce TeleStaff Architecture

*Workforce TeleStaff is an HTML5 browser application that is independent from the operating system platform. It supports popular MS SQL database technology, offers an IVR platform, and is deployable in the Kronos private cloud for maximum flexibility or on premises within a customer's environment.*



### Workforce TeleStaff Modules

The following modules are part of Workforce TeleStaff and may be implemented over time based on the overall implementation schedule.

- **Contact Manager:** Routes messages to the appropriate message delivery module. Contact Manager also ensures that messages are sent out in the priority order received from Workforce TeleStaff.
- **Line Manager:** Controls each logical line in the IVR system.
- **Email Manager:** Sends employee emails from Workforce TeleStaff using standard SMTP protocols.
- **Task Manager:** Automatically initiates predefined tasks that execute certain functions within Workforce TeleStaff, helping to alleviate repetitive tasks for staffers and system administrators. The following is a sample list of these tasks:
  - o **Auto-Alarm:** Notifies roster alarms for user-defined dates, shifts, and regions.
  - o **Auto-Approve:** Approves work code requests on the roster. Once activated, the Task Manager builds a roster day and counts the number of user leave requests, validates against the number of approved leave requests, and approves them in accordance with organizational policies.
  - o **Auto-Assign:** Fills new vacancies on the roster in accordance with the organization's policies and procedures.
  - o **Auto-Fax Roster:** Faxes the Workforce TeleStaff roster to a location (requires faxing services to be enabled).
  - o **Auto-Finalize:** Finalizes the roster in preparation for reporting and payroll.
  - o **Auto-Hire:** Offers work opportunities and automatically commits employees to the work.
  - o **Auto-Notify:** Sends notifications to users via the workstation, outbound phones, and internet.
  - o **Email Reports:** Emails user-defined reports to a user-defined email address.
  - o **Payroll Export:** Exports scheduling data into XML and CSV formats for dynamic data ranges and feeds scheduling data to payroll systems.
  - o **Gateway Manager (optional module):** Exports scheduling data in XML and CSV formats for dynamic date ranges and sends roster and personnel data to CAD, RMS, and HR systems.
  - o **Penalty:** Manages any scheduling penalties assigned to staff for expired offers.
- **Workforce TeleStaff Importer:** Imports initial employee and scheduling information using CSV file format.

Workforce TeleStaff delivers a flexible yet powerful architecture that enables today's public safety organizations to deliver specialized scheduling functionality while still meeting IT's requirements for a highly available, highly scalable, and easy-to-maintain scheduling application.

## Environments Supported by Workforce TeleStaff

### Application Server O/S:<sup>1</sup>

- Windows Server 2008 R2 SP1 64-Bit (Standard, Enterprise, or Data Center)

### Databases:

- Microsoft SQL Server 2008 R2 SP1 (Standard, Enterprise, or Data Center)
- Sybase ASA v12 (on premise only)

### Application Containers:

- Apache Tomcat 7

### Browsers (HTML5):

- Safari
- Chrome
- Firefox
- Internet Explorer

### Web Server:

- Apache Tomcat (with Web server supporting both HTTP and HTTP/S (SSL) communications)

### IVR/Telephony:

- Voxeo Prophecy (on-premise IVR) or Voxeo Evolution (hosted IVR)
- AudioCodes Media Gateway (on-premise, non-SIP environments only)

### Mobile Devices:

- Apple iPad (iOS 6.1.3)
- Android v4.3

### Virtualization:

- VMware 4.1 or greater
- Microsoft Hyper-V

### Configurations Supported:

- HTTP Connectors
  - SSL-SSLv3/TLSv1 (default)<sup>2</sup>
  - HTTP (for redirection to SSL only)
- Sessions
  - Secure + Http-Only Cookies (default)
- JavaScript (Required)
- No Required Plug-Ins (Flash, ActiveX, Java, etc.)

### Authentication Mechanisms:

- Microsoft Active Directory
- LDAPv3 (simple)
- Application (default)

### Peripherals/Software and Hardware Licensing:

- Microsoft SQL Server or Sybase ASA Concurrent Licensing (OEM)
- Voxeo Prophecy (on-premise IVR) or Voxeo Evolution (cloud-hosted IVR)
- AudioCodes Media Gateway (on-premise, non-SIP environments only)

## Workforce TeleStaff Sizing for On-Premise Customers

### Sizing Assumptions

The following assumptions were applied when sizing each of the different environments: These are Workforce TeleStaff-specific configurations. Data sizing is based on typical use for a seven-year period. More frequent imports, rotations, tasks, staffing, and edits triggering audits will result in higher data growth rates.

Days in roster view: 1

Employee per institutions: <= 1000

Employee / staffer ratio: 10:1

Peak 100% on-duty staffers logged in

Peak 5% end users logged in

Peak change concurrency 1.5% (15 per 1000)

Peak change ratio 5% / institution / day (50 per 1000)

Fill-By Rules: First List

Task Schedule/Frequency:

- Auto-Hire – Daily
- Auto-Fix – Daily
- Auto-Finalize – Daily
- Auto-Assign – Daily
- Auto-Approve – Daily
- Auto-Notify – Daily

SSL termination occurs at application

Session replication disabled in multi-node configurations

Clustered cache enabled via JMS and Multicast

Java Heap = Total RAM less 3G

20 concurrent IVR ports

Weekly person import

Daily schedule export (1/institution)

Specification based on AMD 2356 2.3 GHz cores

<sup>1</sup> For Canadian organizations, the operating system must be installed with English (U.S.) in Regional Settings.

Additionally, the Windows Server Operating System must have the region and language settings selected as English (U.S.) on any servers hosting Workforce TeleStaff.

<sup>2</sup> The customer organization must provide SSL certificate. The self-signed certificate provided with installation is not acceptable for production use.

## Technical Specifications

## Environment Standards

OS: Microsoft Windows 2008 R2 SP1

Database: Microsoft SQL Server 2008 R2 SP2

< 1,000 Employees		< 2,500 Employees		< 5,000 Employees		≥ 5,000 Employees	
S1: Application Server		S1, S2: Application Server		S1, S2, S3: Application Server		Custom Configuration	
8G RAM		12G RAM		12G RAM		Usually, with over 5,000 employees, the configuration of tasks run and the integrations become more complex and CPU-intensive. Allocating separate systems to manage activities such as task management becomes critical as the load of tasks can start to impact user experience.	
4 CORE		4 CORE		4 CORE			
OS Volume	Customer standard (min 50G recommended)	OS Volume	Customer standard (min 50G recommended)	OS Volume	Customer standard (min 50G recommended)		
Swap Volume	> Total RAM	Swap Volume	> Total RAM	Swap Volume	> Total RAM		
Application Volume	10G	Application Volume	10G	Application Volume	20G		
S3: Database		S4: Database					
8G RAM		8G RAM					
4 CORE		4 CORE					
OS Volume	Customer standard (min 50G recommended)	OS Volume	Customer standard (min 50G recommended)				
Swap Volume	> Total RAM	Swap Volume	> Total RAM				
Database Data Volume	10G	Database Data Volume	20G				
Database Log Volume	5G	Database Log Volume	10G				

**Hardware Platforms:**  
The Kronos Workforce TeleStaff application can run in physical and virtual environments. Capacity requirements are independent of deployment platform. VMware ESXi 4.1, ESX 5.x, and Microsoft Hyper-V are supported virtualization platforms. Refer to VMware for supported guest operating systems.

Note: `jdbc.partition Count=5` (increased from 3).

To learn more about the architecture of Workforce TeleStaff or how this solution can help you automate your most important staff-scheduling processes, please visit [www.kronos.com/publicsafety](http://www.kronos.com/publicsafety) today.



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## Unify Your Core Enterprise Systems with Kronos Workforce TeleStaff

Integrating enterprise systems and sharing data is critical to an organization's overall success. This is especially true in emergency services organizations, where users don't have time to search for data, re-key important information, or log in to multiple systems to get the answer they need.

When it comes to integrating your workforce management solution with your existing enterprise systems, Kronos® Workforce TeleStaff™ delivers. Workforce TeleStaff includes powerful interfaces to automatically integrate with your existing enterprise systems and simplify the way you share personnel, roster, scheduling, payroll, and time and attendance data.

Unify your core of enterprise systems. Using time-tested and proven import and export interface tools, Workforce TeleStaff helps your users save time, increase efficiency and productivity, and gain faster, better access to the data they need — when and where they need it.

Industry-standard formats make data sharing easy ... with the systems you already use

Workforce TeleStaff imports and exports data using such industry-standard formats as CSV and XML, which helps make the data-sharing process faster, easier, and more intuitive.

Workforce TeleStaff can also import and export data with many of today's most popular third-party systems, including:

- Computer-aided dispatch
- Records management
- Payroll
- HR
- Time and attendance

With Workforce TeleStaff, your users gain a better way for sharing vital workforce management data to a wider array of third-party systems.

### The right tools for your data-sharing objectives

For maximum convenience and choice, Workforce TeleStaff also offers three different interface tools to import or export data directly to third-party systems:

- **Gateway Manager:** Exports employee, schedule, and time and attendance data\*
- **Import Manager:** Imports employee, schedule, time and attendance, and accrual data
- **Export Tool:** Exports employees' time and leave data to third-party payroll systems

\* Workforce TeleStaff Gateway Manager is an optional add-on.

## Key Benefits

- > **CONNECT** previously disparate enterprise systems and streamline critical workflows
- > **ELIMINATE** repetitive and redundant work processes
- > **REDUCE** the amount of errors that result from manual data entry
- > **HELP** users access information faster and more efficiently

## Common data fields improve business processes

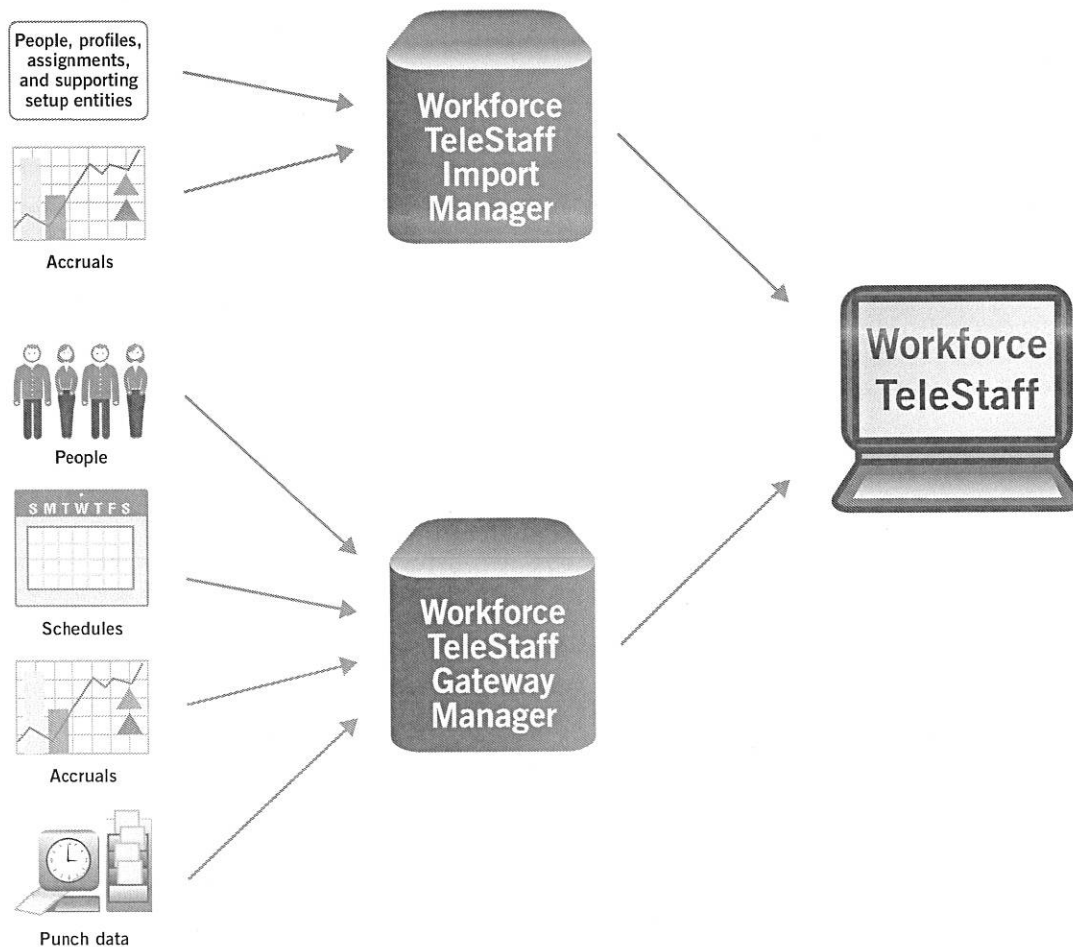
Workforce TeleStaff organizes many of the most common data fields in intuitive message families. Each message family contains specific data fields needed to support critical business processes within other enterprise systems and are available for immediate use.

The Workforce TeleStaff message families include:

- **Person:** Exports employee data fields
- **Roster:** Exports roster data fields
- **Payroll:** Exports payroll data
- **Time and labor data:** Exports roster data related to time and labor

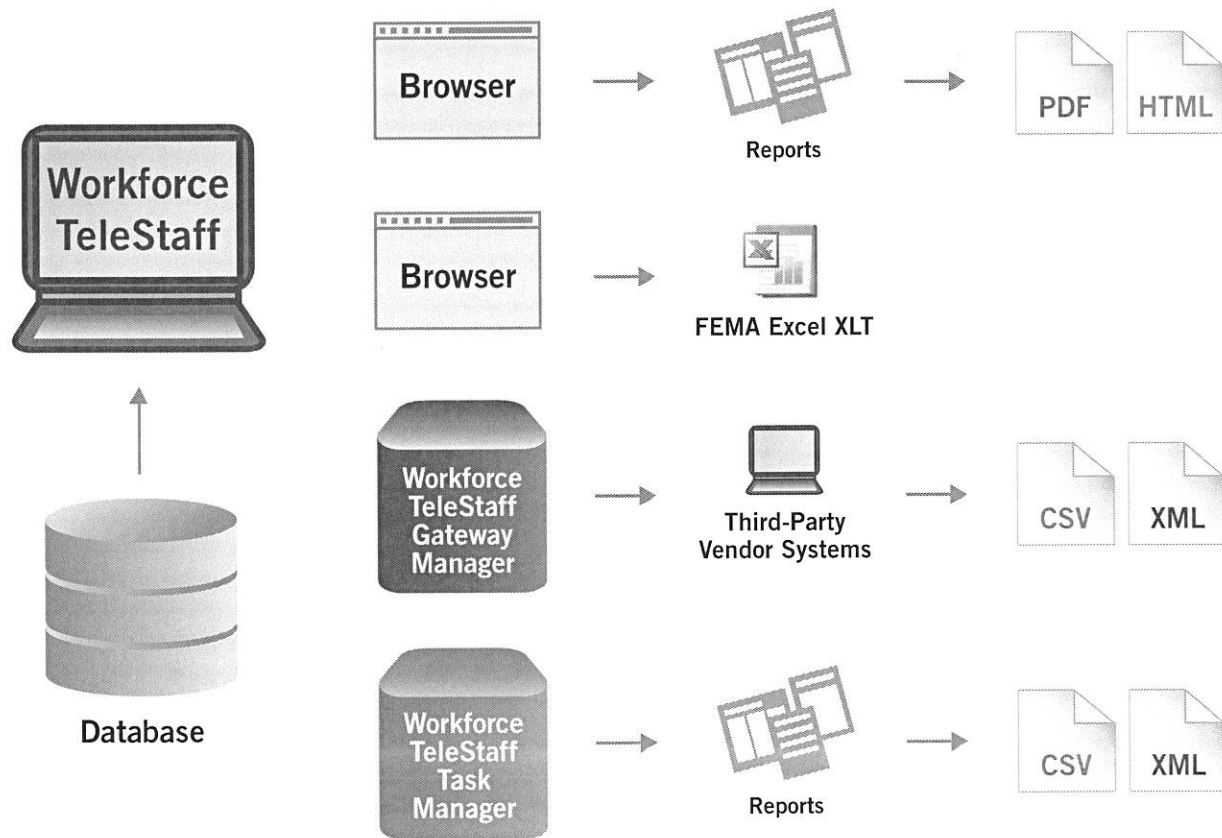
By grouping the most common data fields into these message families, Workforce TeleStaff makes it faster and easier to compile and share data.

## Importing into Kronos TeleStaff



*With two different options for importing critical workforce management data, Workforce TeleStaff simplifies your data-sharing processes while serving as a central repository for this information.*

## Exporting from Kronos TeleStaff



*Workforce TeleStaff also exports important data using industry-standard formats, key to giving users more intuitive tools for sharing information.*

## Integrating with a wide array of enterprise solutions

With these interfaces, Workforce TeleStaff can integrate with today's leading enterprise systems. Below is a sample of the third-party systems with which Workforce TeleStaff can integrate.

RMS	CAD	Time and Labor	Payroll
ACS	Archonix	ADP	AccuFund
Archonix	Intergraph	Stromberg	ADP
EmergiTech	IPC	Kronos	Eden
Emergency Technologies	Motorola		Great Plains
ESO Solutions	TriTech		Kronos
FDM	Tiburon		New World
First on Scene	VisionAir		Oracle
High Plains			PeopleSoft
Intergraph			SAP
Red Alert			Tyler Technologies
Tiburon			
Zoll Data			

Unify your core enterprise systems today with Workforce TeleStaff. To learn more about the integration capabilities of Workforce TeleStaff, or how this solution can help you automate your most important staff-scheduling processes, please visit <http://www.kronos.com/product/public-sector-scheduling/telestaff.aspx> today.



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# KRONOS WORKFORCE TELESTAFF AND INTERACTIVE VOICE RESPONSE (IVR) SYSTEM

TECHNICAL DATASHEET

## Overview and Configuration Options

Fast, reliable, and documented communications are critical in public safety. That's why the Kronos® Workforce TeleStaff™ solution fully integrates scheduling and communications using a market-leading interactive voice response (IVR) platform so that daily scheduling, emergency response, and workforce management tasks are automatically delivered over voice, email, and text devices quickly and reliably — and fully documented.

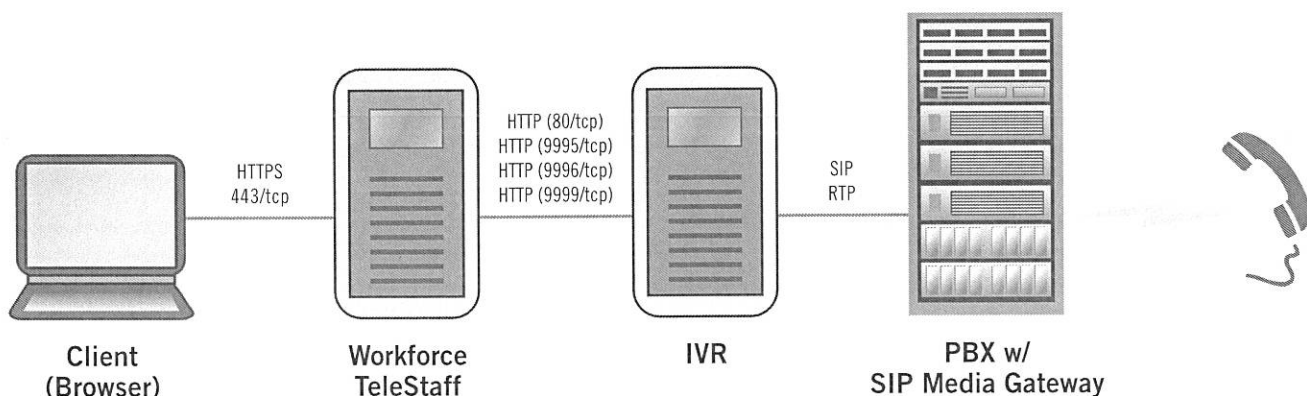
Workforce TeleStaff leverages a robust interface to an IVR system, Voxeo® Prophecy™. As a high-performance IVR platform for inbound and outbound communications, the Prophecy platform is built natively on Voice over IP (VoIP) technologies and supports VoiceXML, CCXML, ASR, and TTS. Prophecy also offers call progress analysis for outbound communications, answering machine detection to direct call flow based on human/machine response, real-time monitoring, reporting, and on-demand hosting or on-premise deployment options.\*

### Kronos Workforce TeleStaff and IVR Configuration Options

#### Option 1: SIP Trunk Through PBX

In this configuration option:

- IVR solution communicates with media gateway integrated with PBX
- Workforce TeleStaff communicates with the IVR solution using HTTP
- Nonstandard ports are used for monitoring, management, and call initiation
- Inbound/outbound calls are routed through PBX over existing telecom
- Best suited for organizations that support SIP internally and have a high call volume

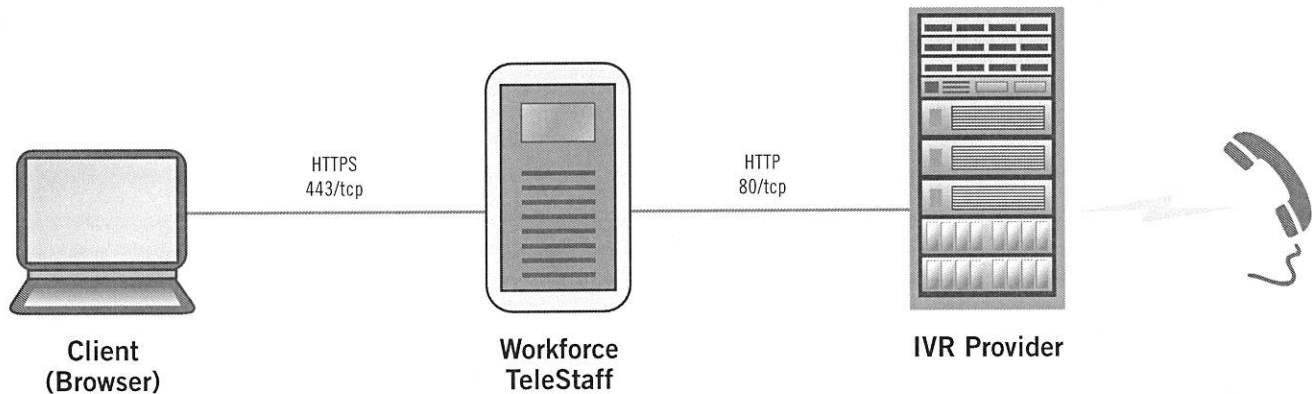


\* Note: Workforce TeleStaff does not currently place calls to SIP phones/devices.

*Option 2: Externally Managed IVR*

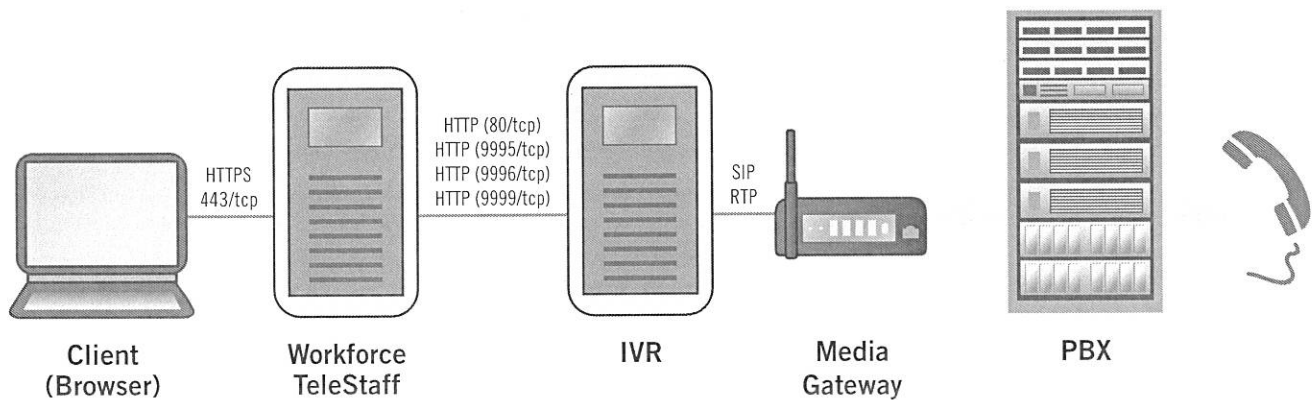
In this configuration option:

- Workforce TeleStaff and the IVR solution communicate over HTTP for both inbound and outbound call initiation
- Best suited for organizations with a small to medium number of phone users or when procurement of a replacement IVR solution is not desired

*Option 3: SIP to Media Gateway — Analog Extensions*

In this configuration option:

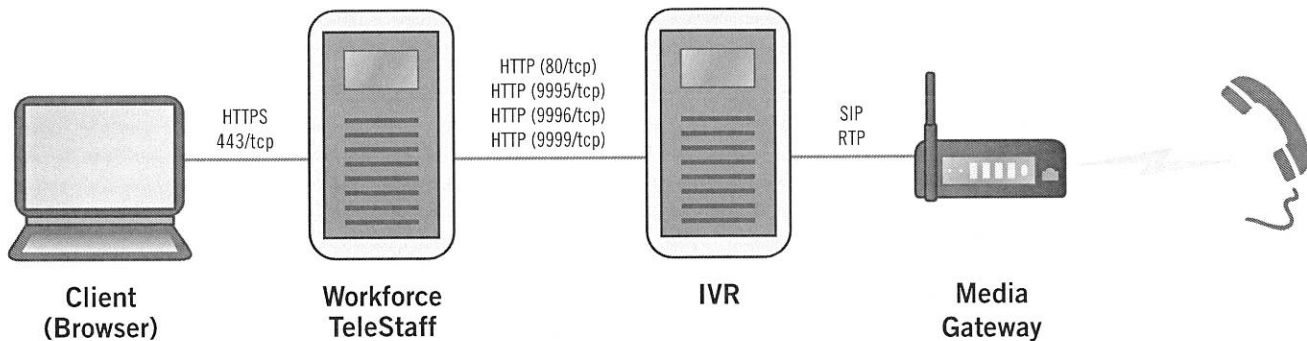
- IVR communicates with new media gateway integrated with PBX analog extensions
- Workforce TeleStaff communicates with the IVR solution using HTTP
- Nonstandard ports are used for monitoring, managing, and call initiation
- Inbound/outbound calls are routed through PBX over existing telecom
- Best suited for organizations with a high call volume but without SIP support for the PBX



## Option 4: SIP to Media Gateway — Analog Lines (POTS)

In this configuration option:

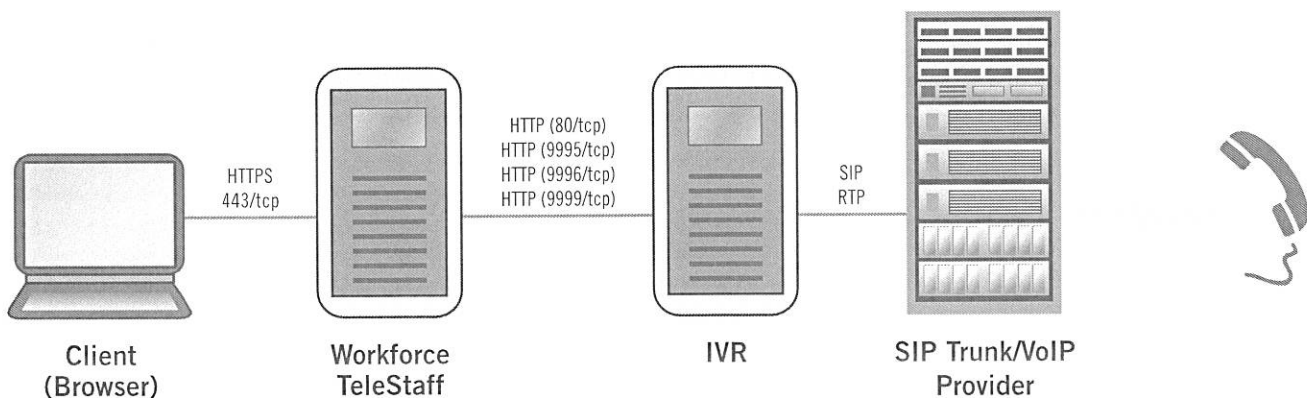
- IVR communicates with new media gateway integrated telecom POTS
- Workforce TeleStaff communicates with the IVR solution using HTTP
- Nonstandard ports are used for monitoring, managing, and call initiation
- Inbound/outbound calls are placed over dedicated POTS lines
- Recommended for organizations that do not support SIP or wish to maintain analog lines



## Option 5: External/Third-Party SIP Trunk

In this configuration option:

- IVR communicates with third-party SIP provider
- Workforce TeleStaff communicates with the IVR solution using HTTP
- Nonstandard ports are used for monitoring, managing, and call initiation
- Recommended for organizations that have SIP trunk already available from external third-party provider



## Kronos Workforce TeleStaff and IVR Network Connectivity Overview

- Open network ports between internal networks and WAN are dependent on selected solution
- Labels on pictures from previous pages map to the list below
- Ports (on-premise IVR)
  - o HTTP — 80/TCP
    - IVR -> Workforce TeleStaff (inbound/outbound conversations)
  - o SIP — 5060/TCP / 5080/TCP
    - 5060/TCP default
    - Range can be provider/implementation-dependent
  - o RTP — UDP/range (e.g., 10000/UDP – 20000/UDP)
    - Range dependent on provider
    - # of licensed ports x UDP ports connection
  - o 9999/TCP — Workforce TeleStaff -> IVR (outbound call initiation)
  - o 9995/TCP — IVR host management (IT/support)
  - o 9996/TCP — IVR application management (IT/support)
- Ports (hosted IVR)
  - o HTTP — 80/TCP
    - IVR -> Workforce TeleStaff (inbound/outbound conversations)
    - Workforce TeleStaff -> IVR (outbound call initiation)

**KRONOS DOES NOT TAKE RESPONSIBILITY FOR HARDWARE PURCHASED BY CUSTOMER**

Customer is responsible for implementing and maintaining the technical (hardware/software/network) environment in which Workforce TeleStaff operates. As such, the customer is responsible for all environmental considerations including but not limited to operating Workforce TeleStaff in virtual environments. Customer is also responsible for configuring firewall and security settings so that Workforce TeleStaff and Web Access components are operational. In addition, customer is responsible for installation and maintenance of Dialogic cards, splitter cables, and analog telephone ports and/or alternative digital or VoIP systems. Kronos specialists can provide technical information and recommendations but cannot be responsible for customer's unique technology environments. This includes the database maintenance and administrative tasks.





## KEY BENEFITS

- Anytime, anywhere access to in-depth training materials without leaving the workplace
- Manage content and train users from one central location
- Help employees maximize productivity on Kronos tools
- Accelerate end-user adoption
- Reinforce and / or update skills
- Easily track and manage training to meet competency or compliance goals
- Provide a consistent learning experience for employees

## Helping You Work Smarter with KnowledgePass

When you work with Kronos Services, you get the experience you expect, along with a wide range of educational options to help you work smarter. Get new employees up to speed quickly with in-depth training. Develop the skills of your existing team members. Kick off implementation or upgrade projects on the right foot with proper training and education. The more educational resources you and your employees have access to, the more productive you'll all be on the job. And the greater impact you can make on your organization's bottom line.

KnowledgePass™ is an online educational portal that provides 24/7 anytime-anywhere access to in-depth training content to help your employees maximize productivity and achieve their goals — from implementation to optimization. Gain instant access to helpful tutorials, job aids, in-depth, hands-on how-tos, webinars, and educational documents to help your team succeed. Support your managers, end-users, administrators, and IT staff members with access to the educational content and support tools necessary to set up, complete, track, and measure training activities. Plus, KnowledgePass offers the convenience of online learning with the cost savings of a subscription service.

### Provide the educational tools that prepare your team for success

Prepare your project team for implementation with KnowledgePass, complemented with instructor-led training courses. Access a wide variety of education options that help you define the learning paths that meet the individual training needs of your employees and promote self-sufficiency. When you provide your team with thorough training far in advance of your project, they'll have the skills and knowledge to lead with confidence and complete your project quickly and accurately.

With KnowledgePass, managing end-user training is quick and easy with intuitive features that allow you to add, edit, remove, or organize users by relevant, customizable categories. You'll be providing the hands-on experience and product knowledge that will increase user comfort level and promote rapid adoption. Plus, you'll have access to training tools that streamline employee onboarding, along with reporting capabilities that monitor the learning activity of new hires.

### Customize the content to meet your specific needs

Work with one of our Kronos subject-matter experts to build KnowledgePass learning paths customized to meet your educational and training needs. We'll help you identify the appropriate tasks for and assign the relevant learning path to your users.

### Upload KnowledgePass content to your learning management system (LMS)

You can now upload KnowledgePass content to your own LMS, pointing thousands of Kronos users to a single location to sign-on for training. This premium feature allows you to manage content, assign courses, and track user progress and performance in a familiar environment. KnowledgePass content, configured in SCORM format, works with dozens of popular learning systems.

### Core KnowledgePass resources

#### User and manager training wizards

Point-and-click training wizards help end-users select the right training, based on their roles and products. Wizards help managers responsible for training and onboarding to identify and assign proper learning paths based on the individual end-user roles and on the organization's objectives and priorities.

#### Tutorials

Self-paced training modules, ranging in duration from 15 minutes to four hours, serve as classroom prerequisites for initial training or new features training or as refresher skills training.

#### Three-minute how-to simulations

Guided, hands-on practice simulations of common tasks that provide effective refresher training or skills reinforcement.

#### Job aids

Handy, printable reference sheets with step-by-step instructions for performing common tasks supplement and support employee training to help ensure optimized system utilization.

#### Sandboxes

Practice what you learned during administration and configuration classes in a live system environment to gain further confidence in your new skills and test drive new features.

#### Ask an instructor

A certified Kronos instructor is available daily to answer questions or provide feedback on course registrations, educational content, and other education-related topics.

### KnowledgePass Learning Live webinars

Monthly webinars, delivered by subject-matter experts, provide the opportunity to dive deeper into topics covered in training and highlight recommended best practices and uses of key features, topics in training and development, change management, and more.

### Reporting

Monitor user activity in KnowledgePass. Export data to popular reporting formats for customization.

### LEADING-EDGE FEATURES

- Advanced interface simplifies navigation and facilitates individualized learning paths
- Enhanced reporting tools allow managers to track course activity
- Easy-to-use wizards help managers assign training to users
- SCORM-format downloadable content for your LMS



TIME & ATTENDANCE   SCHEDULING   ABSENCE MANAGEMENT   HR & PAYROLL   HIRING   LABOR ANALYTICS

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