infra

infra|enterprise

100% WEB SERVICE MANAGEMENT

Incident & Problem Management
Change Management
Configuration Management
Service Level Management

Microsoft
GOLD CERTIFIED
Partner

PinkVerify
ITIL COMPATIBLE
Service Support

Contents:

infra|enterprise

infraEnterprise is a 100% web-based application, designed for automating best practice IT service management processes — Incident, Problem, Change, Configuration, Service Level and Release Management — in corporations that require an enterprise-wide solution.

In an IT and business environment driven by cost imperatives, infraEnterprise delivers an immediate and ongoing return on investment by providing the comprehensive functional support corporations need to automate service management processes and deploy them easily and cost-effectively across the Web.

The infraEnterprise Solution

infraEnterprise reduces costs and provides flexibility to businesses through:

Web technology
Simplified, rapid rollout and upgrade of a 100% Web solution from a centralized database provides users with 'anywhere anytime' access from any web-enabled device, and avoids the logistical effort of configuring the application across the desktop client base.

Process improvement
Comprehensive functional support for automating service management processes based on the ITIL (IT Infrastructure Library) best practice standard, streamlines and reduces the cost of service provision.

Integration
Ease of integration with third party applications via .NET and Web Services eradicates the prohibitive costs formerly associated with enterprise integration projects.

Global integration capabilities, including partitioning, time-zoning and multi-language enable the creation of a virtual team across dispersed operations.

Customer empowerment
Empowering customers to log enquiries and requests and solve problems online, minimizes service desk workload and increases customer retention.

The infraEnterprise Technical Advantage: 100% Web

Rich functionality in an application built from the ground up on an Internet architecture

A proven solution

As one of the first vendors to develop and release a fully web-based service management application, Infra Corporation has built an unequalled track record of years of success implementing Internet technologies in global corporations.

Infra Corporation is a Microsoft Gold Certified Partner, having proven commitment and expertise in delivering software solutions based on Microsoft Windows technology. The Gold Partnership signifies that Infra has passed the highest level of requirements from Microsoft, demonstrating robust, efficient and scalable implementations.

Sharing our experience: Consulting services

Because Infra Corporation has been developing and implementing service management and full web technologies for years, we are able to bring a wealth of consulting experience to each project.

Infra adopts a partnership approach with our clients to define business case and functional requirements, and develop customizations to ensure the technical solution is aligned to your service management strategies and goals.

Infra Consulting Services provide complete project management and technical expertise to implement, customize and integrate infraEnterprise, along with process analysis and ITIL (IT Infrastructure Library) best practice integration.

Windows-style usability in a browser application

infraEnterprise is a totally web-based thin client application — not just a web front end — which delivers comprehensive functionality and a rich user experience by incorporating Active-X, HTML and J-Script.

Multiple windows open within infraEnterprise's unique Wrapper window, providing single click control and navigation.
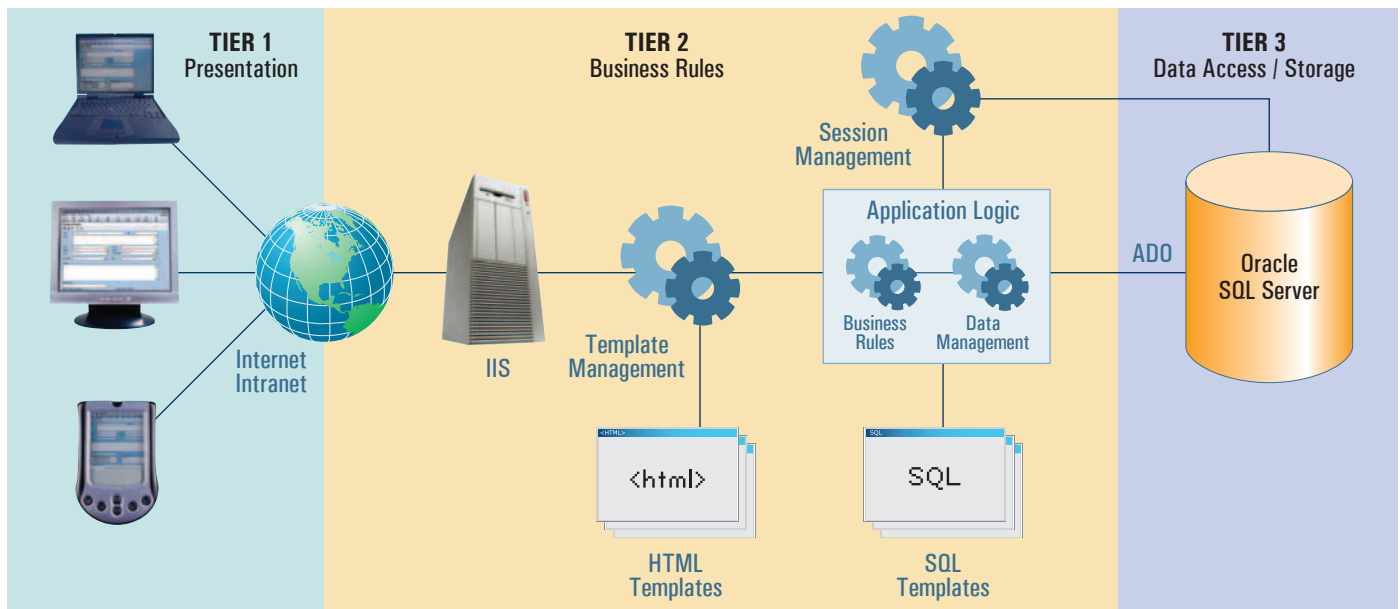
The infraEnterprise architecture
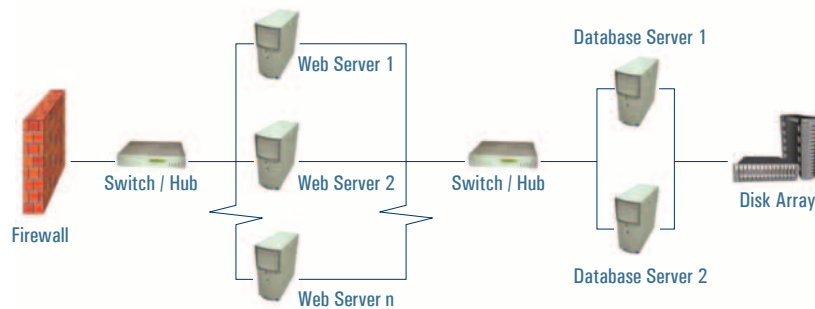
infraEnterprise supports a server farm configuration

Simplified implementation and deployment

The infraEnterprise full web architecture means that no installs are required on client machines, and no setup is required other than on the server.

An installation on a single server with an industry standard RDBMS provides global access to an unlimited number of end users, meaning infraEnterprise can be implemented quickly and with minimal support.

Central control

All implementation, setup and maintenance of infraEnterprise is centralized, reducing desktop and server administration time and costs.

Upgrades and new releases, once installed on the server, download automatically over the Web with no disruption to users, effectively providing zero cost deployment.

Server farms supported

infraEnterprise supports a server farm configuration, where individual users do not need to be configured to a specific server. Proxy servers are supported without additional configuration.

A fully customizable application

The ability to customize each of infraEnterprise's screens simply by editing the HTML templates on which they are built, is just the start of the application's scope for customization.

Using non-propriety industry standard tools, it is possible to customize almost any component of infraEnterprise, from interface entities such as forms, reports and email templates, to SQL queries for custom searches, stored procedures and J-Script validation.

This means that efficiency improvements and changing business requirements can be rapidly configured in the system and made immediately available across the Web.

Best Practice Service Management

Automating ITIL-based processes

Delivering cost and process efficiencies through best practice standards

infraEnterprise provides a lifecycle approach to service management through the integration of comprehensive Incident, Problem, Change, Configuration, Service Level and Release Management processes in a single application.

The integration of these processes in a single application and database is a key strength of infraEnterprise, facilitating the seamless referencing and transfer of data between them.

The role of IT Service Management

A corporation's technology is at the front line of its customer service and organizational efficiency. The high level of dependence on IT resources means that factors such as availability, access and reliable data are fundamental for effective IT management.

At the same time, IT has been repositioned as a provider of services to the business, and must be able to show genuine cost savings and demonstrable business benefits from IT processes and implementations.

In this context, corporations are adopting ITIL (IT Infrastructure Library) best practice standards to align IT Services with the current and future requirements of customers and users.

infraEnterprise and ITIL

Improving IT service and reducing cost to internal customers is a key goal of best practice. ITIL aims to change the role of IT from a cost center providing little measurable business value, to a facilitator of continuous process improvement. Service Level Agreements (SLAs) are incorporated to improve customer service and manage expectations.

infraEnterprise has been independently verified at an enhanced level for ITIL, a guarantee that it will fully and smoothly support the ITIL standard in an IT service environment.
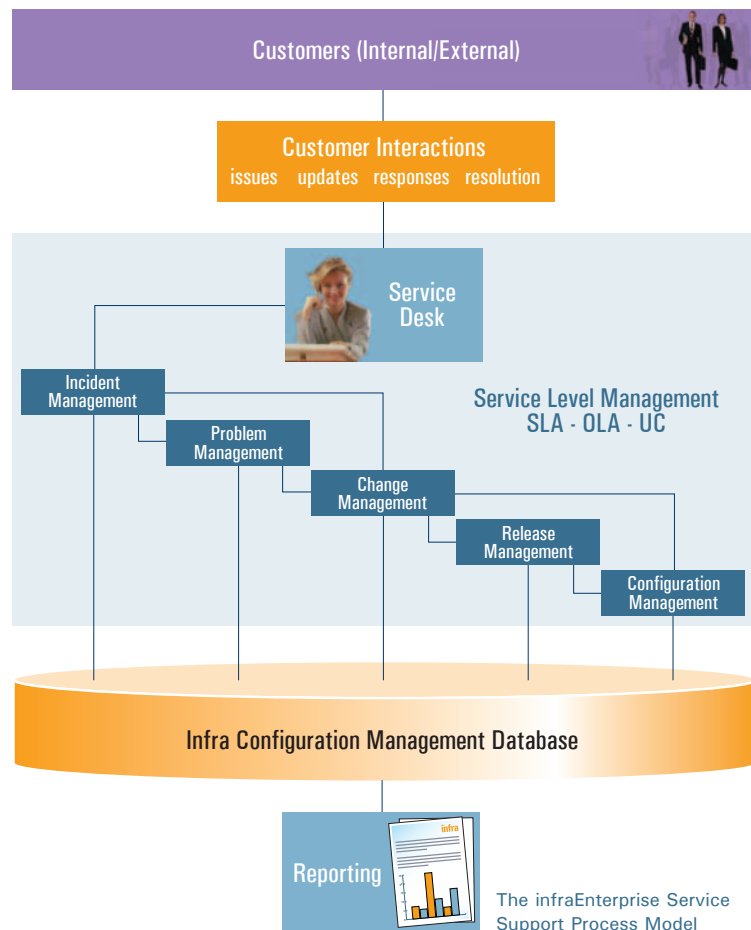
Incident Management

Incident Management aims to minimize disruptions to the business by restoring service operation to agreed levels as quickly as possible.

infraEnterprise's Incident Management system enables incidents to be categorized, prioritized and escalated to the most appropriate support resources.

infraEnterprise ensures incidents are owned, tracked and monitored throughout their lifecycle, from logging and initial investigation through to closure.

infraEnterprise Incident Management incorporates:

☐ definition of standard rules for incident priorities based on impact and urgency

☐ automated routing using built-in skills matching to ensure incidents are directed to the most appropriate or available support group

☐ Knowledge Bank integration to enable service consultants (and customers, via the Customer Portal) to easily search for solutions across a range of media

☐ incident forums and stakeholders based on incident category and priorities, to ensure all relevant parties are kept informed and can review and contribute to critical incidents

☐ integration with Service Level Management to effectively manage service expectations.

Problem Management

Problem Management assists an organization in proactively managing its infrastructure to identify and reduce the number of incidents reported to the service desk. The primary goal of Problem Management is to identify the root cause of incidents and to raise a Request for Change (RFC) to prevent their recurrence.

infraEnterprise's trend analysis, statistical reporting and real-time monitoring capabilities provide analysis of incident data to facilitate the Problem Management process.

infraEnterprise additionally enables the classification of problems based on business impact, urgency and the resources required to implement workarounds or permanent solutions.

Problem Management is fully integrated with the Change Management module in infraEnterprise, allowing change requests to be easily raised and tracked.

Customers (Internal/External)

Customer Interactions
issues   updates   responses   resolution

Service Desk

Incident Management

Problem Management

Change Management

Service Level Management
SLA · OLA · UC

Release Management

Configuration Management

Infra Configuration Management Database

Reporting

The infraEnterprise Service Support Process Model

The Infra Service Desk solution

Service Desk resolution tools
☐ Incident, Problem, Known Error, Change linking
☐ Workarounds
☐ Knowledge Bank
☐ Scripting
☐ Quick calls

Integrated notifications
☐ Users and Officers
☐ Stakeholders
☐ Forums
☐ Ad Hoc
☐ Bulletin Board
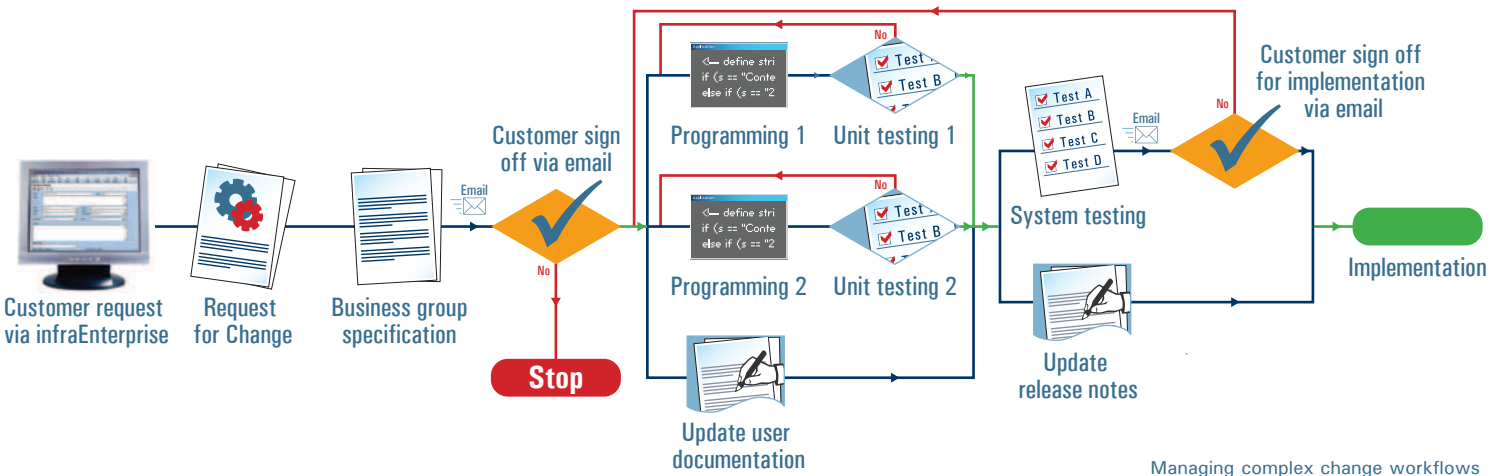
Management tools
☐ Real-time Graphical Monitor
☐ Forum view
☐ Service Level escalation & breach information
☐ Reports across all processes

Advanced features
☐ Time-zoning
☐ Partitioning
☐ Multi-language support
☐ Mail Message Access (MMA)
☐ Role Based Security
☐ Impact/Urgency/Priority derivation
☐ Automated Priority Escalation
☐ HTML email design
☐ Integrated spell-checker
☐ Object Versioning support
☐ Advanced Text Search
☐ Multiple Screen Design
☐ Incoming Email (External Interface)
☐ Computer Telephony Integration (CTI)
☐ Attribute Manager
☐ Forms (Custom Data Entry)

Managing complex change workflows

Diagram labels:
- Customer request via infraEnterprise
- Request for Change
- Business group specification
- Email
- Customer sign off via email
- No
- Stop
- Programming 1
- Unit testing 1
- Test A
- Test B
- No
- Programming 2
- Unit testing 2
- Test
- Test B
- No
- Update user documentation
- System testing
- Test A
- Test B
- Test C
- Test D
- Email
- Update release notes
- Customer sign off for implementation via email
- No
- Implementation

Change Management

Effective service management relies on the ability to make fast, accurate changes to the IT infrastructure, including new installations, upgrades of equipment and software, configuration changes and migrations of customers. As such, change management plays a crucial role in maintaining the currency of data in the Configuration Management Database (CMDB).

Implementing enterprise wide Change Management processes ensures that standardized methods and procedures are used for all changes. This promotes efficiency and auditability in the handling of changes, and so reduces the impact of IT change upon service.

Infra's Change Management solution incorporates key roles and people into processes, full workflow automation and task and approval dependencies, all graphically represented on demand.

Infra's clients have implemented Infra Change Management to achieve:

- a higher turnaround of changes and reduction of rework and duplicated effort

- increased participation of employees in critical business processes

- automated escalation of change requests, eliminating bottlenecks in the change process

- incorporation of defined security controls into change processes

- visibility of all change requests, enabling managers to assess the status of changes impacting their departments

- a reportable history of requests to assist in Continuous Quality Improvement (CQI).

infraEnterprise automates approval capabilities, rejection loop-back functionality and alarm notifications to ensure that change requests are progressed with minimal manual intervention.

Changes to the status of configuration items (such as 'In Repair' and 'Installed') are auto-updated to the CMDB.

infraEnterprise additionally integrates with Microsoft Project, enabling change planning and workflow data to be transferred for graphical representation.

The Infra Change Management solution

Automating processes
- Stencils (change request templates)
- Dependencies
- Approvals
- Task Assignment

Integrated Notifications
- Users and Officers
- Stakeholders
- Ad Hoc
- Bulletin Board

Management tools
- Real-time Graphical Monitor
- Change scheduling
- Escalation view
- Reports
- Stakeholders
- MS Project integration

Advanced features
- Mail Message Access (MMA)
- Role Based Security
- HTML email design
- Object Versioning support
- CMDB integration
- Service Desk integration, Known Error linking
- Automated CMDB Transactions
- Automated Tracking - Audit
- Partitioning
- Timesheets
- Forms (Custom Data Entry)
- Advanced Text Search
- Multiple Screen Design
- Time and cost budgets

Configuration Management

Configuration Management is at the core of effective IT service management. The quality of data within the Configuration Management Database (CMDB) affects the efficiency of the entire corporate service management operation, as all processes and services utilize and feed into and out of Configuration Management.

The infraEnterprise CMDB is more than a simple registry of physical assets; it includes documentation, service level agreements, service catalogs, warranties and knowledge. It enables the enterprise to manage the evolving relationships of those items with customers, internal departments and locations, other organizations and external suppliers.

Additional integration with network management systems such as Microsoft's Systems Management Server (SMS) ensures the CMDB is regularly updated and has accurate configuration information available at all times.

The Infra Configuration Management Database (CMDB) solution

Configuration Items (CIs)
- Unique ID for each CI
- Track and manage relationships between CIs (parent/child, installed on, copy of etc.) and between CIs and customers (locations etc.)
- Graphical display of CI relationships
- Recording of CI baseline information
- Manage customers, external suppliers, contracts, warranties etc.
- Tracking of entire CI lifecycle
- History and audit of CI record
- CMDB verification and integrity audits

Full integration with service management processes
- Search and report on problem CIs
- Associate affected CIs with incident, problem and RFC records
- Reference CI and criticality from incident records
- Assess RFCs based on CMDB data and update CMDB from RFCs

Advanced features
- Finance and lease information
- Advanced Object Management
- Impact analysis
- Location tracking
- CI duplication
- Criticality profiling
- Reporting
- Forms security
- Stakeholders
- Automated transactions from RFCs
- Baseline records
- Versioning
- Systems Management Server (SMS)
- Active Directory integration
- Integration of data for CIs entered from various sources, e.g. purchasing systems, inventory and discovery tools, barcode scanners and manual entry

Contract Management
- External supplier management
- Multiple contract support
- Contract tracking
- Multiple contract types

Financial management
- Cost centers
- Business and client associations - charge back
- Lifecycle view
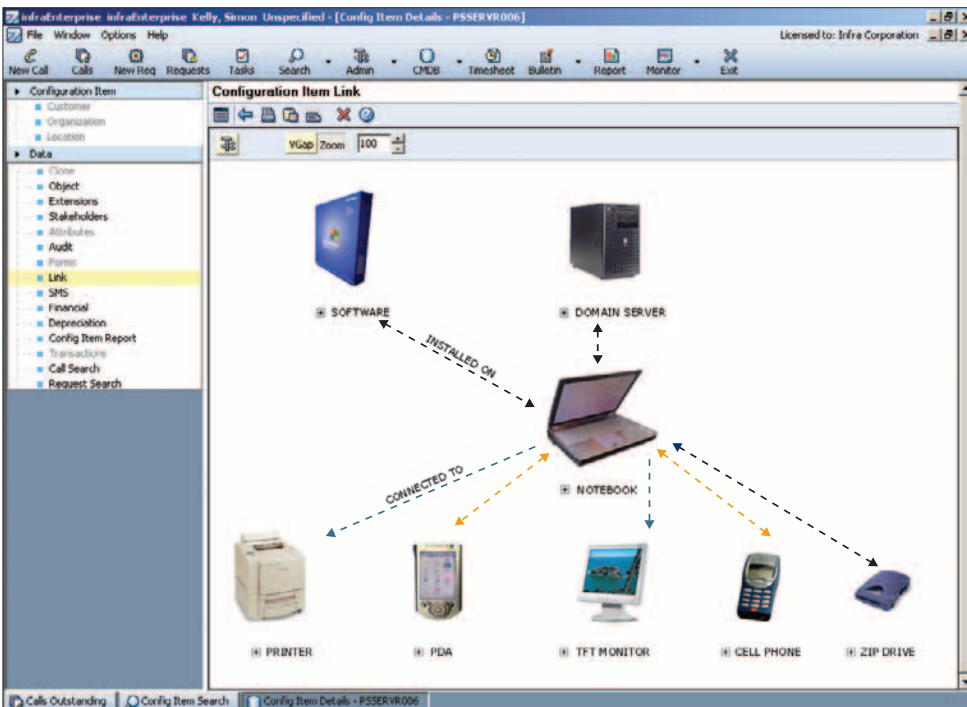
Graphical view of Configuration Item (CI) relationships

Service Level Management in infraEnterprise

Service Level Management

Service Level Management (SLM) is one of the central mechanisms by which IT and support groups can align their services with the strategic goals of their customers and the business.

Automating service agreements is an immediate way to improve service by providing notification of breaches, and ensuring full integration of agreements with incident and problem logging in a common event-driven system.

In the longer term, automation provides historical reporting that enables IT to demonstrate where and how improvements have been made, and thus its continuing value to the business.

infraEnterprise Service Level Management enables the creation and management of all formalized IT service commitments as defined by ITIL.

These include Service Level Agreements (SLAs) with internal/external customers, Operational Level Agreements (OLAs) with internal organizational departments and groups, and Underpinning Contracts (UCs) with external suppliers.

infraEnterprise is designed to provide maximum flexibility in the creation of service targets for individual customers and departments, configuration items and incident categories. Each service agreement can be linked to multiple entities, or easily cloned and modified to meet individual requirements.

The Service Catalog in infraEnterprise lists all of the services currently being provided, summarizes service characteristics, describes the users of the service and details those responsible for ongoing maintenance.

Features of infraEnterprise Service Level Management include:

☐ integrated notification support for internal escalation alarms and service breach notifications

☐ automated agreement identification and details available from the Incident screen

☐ graphical displays of incident status in real-time, including threshold displays

☐ integrated reporting and real-time graphical analysis across all types of formalized service agreements, as well as Incident, Problem and Change Management processes.
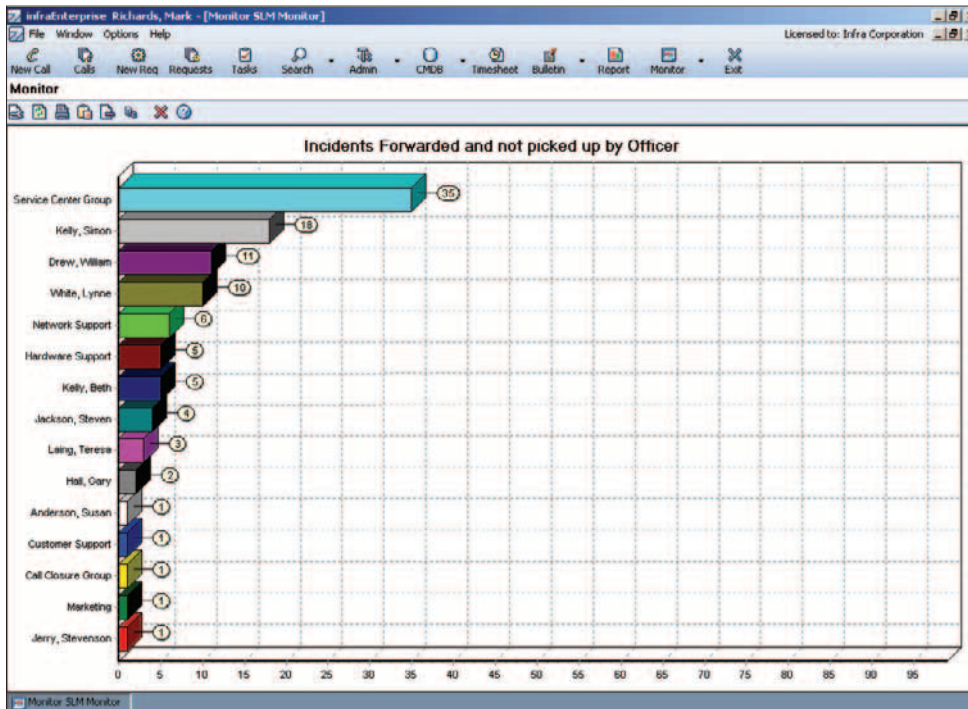
Real-time graphical monitoring and reporting
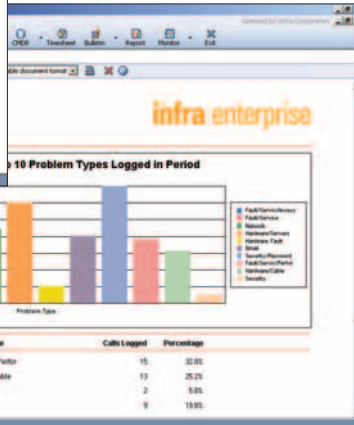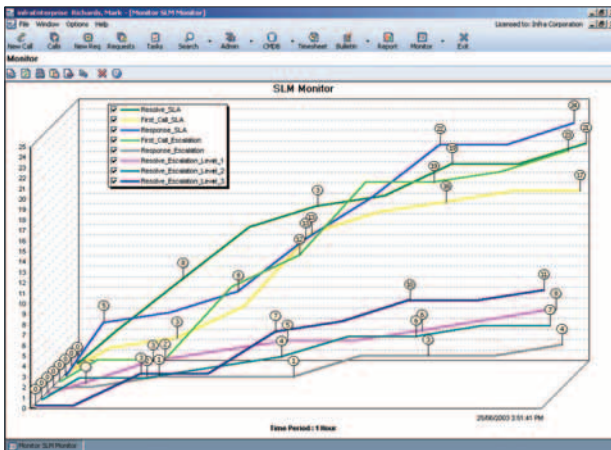
Release Management

Release Management facilitates the introduction of software and hardware releases into managed IT environments, to ensure minimal disruption to the business when IT changes are introduced.

infraEnterprise provides full integration between Release, Change and Configuration Management processes to ensure change impacts are accurately assessed and controlled during a release.

infraEnterprise additionally integrates with leading industry tools to cover all processes associated with Release Management, enabling the smooth coordination of a major release of hardware, software and associated documentation.

Global Integration Technologies

Integrating people and systems

Removing barriers to business by integrating across languages, time-zones, applications, devices and networks

Integrating with third party applications

Application integration strategies such as Microsoft .NET, and a host of new generation technologies such as Active Directory and Systems Management Server (SMS) are assisting in removing the traditional barriers to integration. Those barriers have included multiple data silos, technical complexities and cost.

These new technologies facilitate the sharing of data between applications and synchronize updates to customer transactions and configuration item records, ensuring greater accuracy of data across the infrastructure. This allows IT to be more responsive to changes in business requirements, whereas previously, realignment of IT systems was often cost-prohibitive.

Benefits gained from integrating network applications include:

☐ auto-logging of incidents (e.g. network error alerts) into the infraEnterprise database

☐ synchronizing changes and updates to configuration item and customer data to remove duplication and inaccuracies.

infraEnterprise additionally has the ability to integrate with network management tools including CA Unicentre, HP Openview and IBM Tivoli.
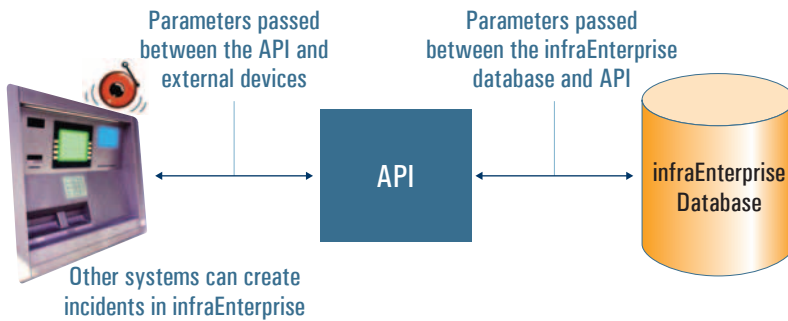
Microsoft .NET and the infraEnterprise API

Infra Corporation has developed infraEnterprise for the new generation of distributed computing defined under the Microsoft .NET platform.

This means infraEnterprise is able to communicate and share data with any other application built on XML Web Services, regardless of its operating system or programming interface.

The infraEnterprise Application Programming Interface (API) is designed entirely on a Microsoft .NET architecture using Visual Studio .NET and XML. All transactions available within the infraEnterprise API are published as Web Services.

By providing a straightforward integration mechanism with other systems, infraEnterprise is thus able to generate new value from legacy and current applications.

Parameters passed between the API and external devices

Parameters passed between the infraEnterprise database and API

API

infraEnterprise Database

Other systems can create incidents in infraEnterprise

The infraEnterprise API publishes all transactions as Web Services

Active Directory

infraEnterprise integrates with Microsoft's Active Directory technology by synchronizing network user details made available by Active Directory with the customer and officer records held in infraEnterprise. With Active Directory acting as the master database, infraEnterprise will mirror inserts, updates and deletions of customers, officers, roles and groups.

Administrators can create officer and customer templates containing a default set of roles and configurations, and link them to Active Directory groups. When new officers and customers are added, all their roles, partitions, contact details and security permissions are automatically established in infraEnterprise.

This tight integration not only reduces administrative effort, but avoids inaccuracy of data and its associated implications for security and productivity.
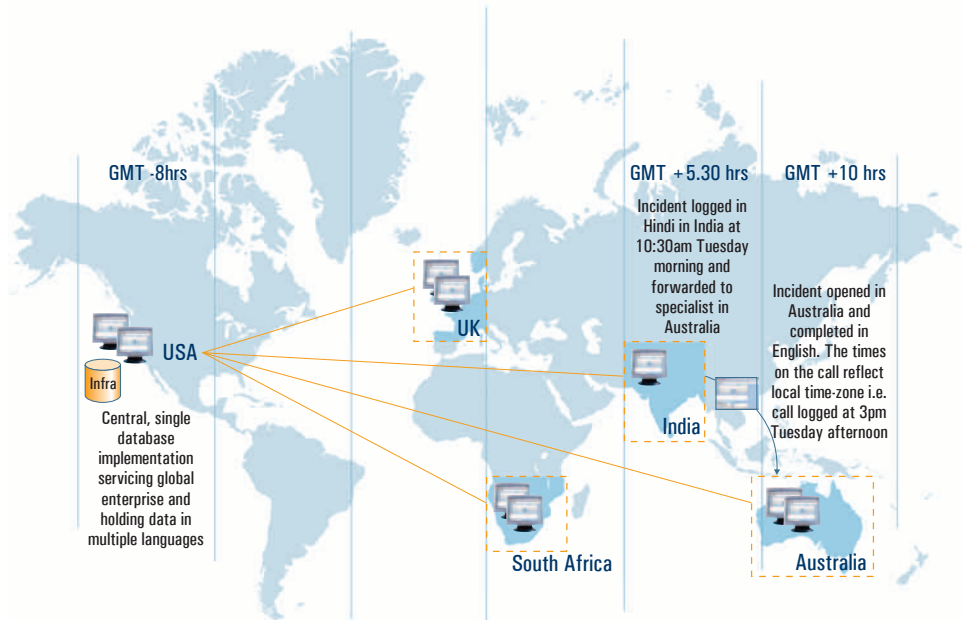
SMS

Microsoft's Systems Management Server (SMS) creates and automatically updates a database of all devices on a network, including their hardware and software configurations.

infraEnterprise integrates with SMS to maintain and update this configuration information. SMS scans items on the network and auto-populates the infraEnterprise CMDB.

Interfaces to core business systems

A combination of interfaces and workflow modules adds value to infraEnterprise without requiring additional configuration in the system.

These include CTI, integration with Microsoft Office and Project applications, Object Linking and Embedding (OLE) and right-click exporting of data to third party applications.

GMT -8hrs

GMT +5.30 hrs

Incident logged in Hindi in India at 10:30am Tuesday morning and forwarded to specialist in Australia

GMT +10 hrs

Incident opened in Australia and completed in English. The times on the call reflect local time-zone i.e. call logged at 3pm Tuesday afternoon

UK

USA

Infra

Central, single database implementation servicing global enterprise and holding data in multiple languages

India

South Africa

Australia

A global enterprise utilizing partitions (for regional views of data), time-zoning and multi-language.

Creating a virtual team

With the growth in consolidation and outsourcing, an increasing number of corporations have staff and operations dispersed across different states and countries, or even different companies.

infraEnterprise enables corporations to create a virtual team across dispersed groups by integrating languages and character sets, partitioning databases across Incident, Problem and Change Management processes, and providing support for multiple time-zones.

The advantages to the business include:

☐ sharing of team resources (particularly specialist knowledge)

☐ partitioned visibility of all calls and requests in progress

☐ reduced infrastructure costs and maintenance

☐ standard processes across all teams.

Partitioning

Partitioning of infraEnterprise's single database enables the integration of diverse operations into a central support system, by making common data available to all groups while still maintaining independent local views.

Time-zoning

With time-zoning, support consultants can view all problems and requests in their local time, while escalations and service level agreements are imposed according to the customer's local time-zone.

Multi-language

infraEnterprise supports a Unicode character set, which allows the support of multiple languages in a single application and database. This is ideal for global enterprises that may have calls logged in one country and resolved in another with a different language.

Mail Message Access

With integrated Mail Message Access (MMA), anyone with access to email also has access to infraEnterprise. Incidents logged in infraEnterprise can be delivered and actioned by email via embedded URL. Occasional users do not need to be continually logged into the application, reducing the workload for the service desk in following up outstanding work.

Customer Portal

Directing customer support into cost-effective online channels

Providing 24x7 web access to service management resources for internal and external customers

infraEnterprise provides a complete web self-service package — Customer Portal — that aims to not only meet but exceed customer expectations of online service, and deliver cost-efficiencies through reduced phone contact with the service desk.

Customer Portal provides a single point of access for all customer support problems, enquiries and requests. It enables specialist service management functionality to be made available to internal and external customer groups to:

☐ log and track incidents, problems and requests at any time, from any web-enabled device

☐ find answers to simple enquiries or complex problems through Knowledge Bank access and self-help scripts, including associated documentation

☐ be notified of events such as planned outages, pre-empting calls to the service desk

☐ provide feedback on the effectiveness of support services and channels to continually improve the service.

As a component of the infraEnterprise solution, Customer Portal is 100% web-based and operates on a variety of browser types and versions.

The Portal is based on standard HTML with no proprietary controls or plug-ins, so can be easily customized and integrated into an existing web site or modified to conform to corporate standards.

Knowledge Bank

Via Customer Portal, your external customers and off site staff can be given selective access to your infraEnterprise Knowledge Bank, delivering 24x7 access to knowledge resources.

The infraEnterprise Knowledge Bank supports:

☐ free-text search across a variety of knowledge types (FAQs, document abstracts, web sites, directories) and advanced filtered searches based on date, multiple tier profiling and knowledge subtypes

☐ search result entries containing attachments such as documents or URL links

☐ automated scoring and search result ordering to maximize search success

☐ indexing of results from documents on intranets or external web sites, significantly increasing the access of customers to your intellectual resources. These automated collections are run on a user-defined schedule.

Customized Customer Portal screens

Scripted solutions

Scripted solutions in infraEnterprise enable the guided resolution of complex or common problems. Customers select a predefined problem category and are led step-by-step through a series of questions and answers.

Files such as documents and diagrams can be attached at specific points of the script to draw together all the resources customers need to solve the problem.

If the customer is unable to resolve the problem via the script, the application maintains a record of the selections, which are logged through to the service desk as an incident for follow up.

Automatic surveying of customer feedback

Infra's Customer Survey module removes the ad hoc nature of measuring the customer experience, by enabling all or selected customers to be automatically surveyed after a call has been closed.

The module builds a comprehensive reference database, continually compiling statistics in the background of normal service desk operations, which can be easily referenced at any time by running reports in the infraEnterprise system.

By obtaining feedback on both the service received and channels used (including the Customer Portal itself), IT managers are able to fine-tune and ensure reuse of the service, with all the associated cost-efficiencies.

The survey is sent to customers as an email containing an embedded URL. The customer clicks the URL to complete the survey and submit the customized web-based form.

Multiple surveys can be delivered and personalized according to audience and survey frequency to specific customer groups.

Proactive notification via the Bulletin Board

Many businesses need to keep customers notified of important events, especially ones that may impact on business services. These events include planned outages and service interruptions.

The Customer Portal provides access to the infraEnterprise Bulletin Board, which displays messages posted to customers. It is possible to attach files with posted messages, e.g. release notes for new software upgrades.

infra

Regional Head Offices

Los Angeles
www.infra-corp.com

Sydney
www.infra.com.au

London
www.infra.co.uk