Introduction:
Welcome to the Version 9.0 New Features document. To best introduce existing Web+Center users with the new Version 9.0, we have written this NEW FEATURES guide. We recommend you review the Web+Center Version 9.0 user guide for more complete details or features that are explained with any previous version.

Overview: Version 9 is a major version upgrade but still completely database upgradable from Version 8.0 or any previous Web+Center version. To upgrade from a previous version, you must have both a purchased license key for 3 or more techs and also have a current support/upgrade contract. Contact Internet Software Sciences sales at sales@inet-sciences.com if you have any questions concerning your eligibility for upgrading.

V9 Architecture – Version 9.0 utilizes the same ASP (active server pages) scripting language and backend databases (SQL or ACCESS) as previous Web+Center versions.

V9 User interface – V9 has now replace the basic Tech+Center HTML “3-frame” user interface with a more modern HTML5/Bootstrap user interface coding model. This will provide a solid HTML framework going forward that is set up to use HTML programming elements while still offering customizable ASP coding methodologies. The mobile applications (Tech+Mobile and Customer+Mobile) continue to use JqueryMobile as the mobile interface platform with ASP as the scripting language.

Some examples are provided to help those interested in using HTML 5 and higher level bootstrap coding conventions in their customizations.

V9 Applications – Version 9.0 offers the same 6 applications as Version 8.0 and provides a wealth of integrated applications solving requirements for IT ticketing, asset management, Sales and CRM applications, invoicing and accounting functions, and equipment and facilities reservations.

- Tech+Center – Comprehensive applications for techs to track and manage support tickets
- Customer+Center – Simple application for customers to create, update and manage support tickets
- Tech+Mobile – Application for techs to track and manage support tickets, assets and customers via their smart phone and mobile devices
• Customer+Mobile - Application for customers to create, track and update their applications with their smart phones and mobile devices

• Business+Center – Comprehensive, integrated application to manage the business side of your support operations for sales, CRM and invoicing features.

• Reservation+Center – Create a graphical catalog of resources that can be reserved and checked out.

**Version 9.0 Installation Requirements** - Version 9.0 installs into separate physical folders from previous Web+Center installations. The default folder is:

\[ C:\&quot;program files (x86)\&quot; \| Internet Software Sciences \| Web+Center 9.0\]

The IIS webserver application directories are all re-labeled with “90” to:

- Tech90
- Customer90
- TechMobile90
- CustomerMobile90
- Language90
- Reservation90
- Business90

**Version 9.0 Installation Scripts** – Included with Webcenter.exe Version 9.0 install .exe will be some new install CMD scripts that will greatly reduce the time require to install Web+Center. These install.cmd scripts will:

- Configure all 6 of the IIS webserver application directories and 2 virtual directories
- Configure IIS settings for parent paths, 32 bit operations, and ASP debugging and other settings
- Configure ODBC DSN settings for Web+Center 9.0 database connections

**Version 9.0 Design Goals and policies**

At Internet Software Sciences, we think about your current installation, users and migration issues when designing the next version. There is nothing more frustrating for users who are familiar, and proficient with an application only to be forced with a new version where the features have been completely remapped or hiding under new screens and options or possibly dropped or changed for the worse.

Probably the most visible design change is the conversion of the Tech+Center (3) frame navigational page to a similar but cleaner HTML 5 / Bootstrap interface. This provides options for buttons on the left and other navigational options along the top.

Several new security features have been integrated into the application to better monitor and report attempts at non authorized uses of the software.

New Geolocation features have been incorporated into the software that can accurately use the GPS enabled mobile devices to record locations of techs, customers, and assets.

**Backward compatibility and consistency** - No database changes or features in V8 have been dropped or no longer available in V9. New features and new database tables and columns have been added carefully to allow for easy transition and upgrading for existing users.

New Major Features:
Personalized Support

Support of users is usually mutually beneficial if there is a personal connection between the customer and technician. Version 9.0 allows both the “tech” and “customer” to attach an image to their tech or customer account for use in various notification emails. So when customers get an alert notification about their ticket, they get a photo of the technician servicing their issue. Putting a face to a technician forces both the tech and customer to provide more respect for the person working to solve the problem. This option is completely optional and can be enabled for Tech, and or Customer or none. Additional techs and customers have two text boxes to write a bit about themselves and describe their interests. These fields could also be used to define technicians expertise and qualifications and other contact information.

To Enable Personalize support option

- Click on Administration
- Click on System Configuration Menu
- Click on More Configurations Options

On the right hand side there are two check boxes
- Tech Personal Connection Options
- Customer Personal Connection Options

Selecting those options will enable options to attach a photo image when:
- Selecting the My Profile Link in Tech+Center
- Selecting the Customer+Center Registration Option

OR also available in
- Customer+Mobile – Registration Edit under personal option
- Tech+Mobile – My Info

Personalized Email Notifications
Example Notification email to customer showing technician personal connection

**Start/Stop Clock for accurately recording Technician time**

If you have extended Time and Billing record option enabled, you will notice the Launch Timer Popup button in the Extended Time and Billing record area.

Clicking on the button will bring up a separate pop up window with a Start Clock button.

Press the Start Clock button to start the Clock. A count up clock will start for this case from which it was launched. Keep this window open.

Once you press the stop clock, it will prompt you for some time spent information setting Billable, Hourlyrate and notes. Press submit to enter this time spent entry.
Your Time Spent entry create the START/STOP clock will appear once you refresh the case ticket.

**Web+Center For Business**

Many Web+Center users are small, outsourced IT support businesses that support a variety of clients for IT support and PC repair. They need to track, invoice and bill customers for their services. Sometimes that service requires purchasing expense items as well which needs to be billed along with time spent for clients. Web+Center for Business functions included with the Business+Center provides an integrated ticketing application of the Tech+Center with the invoicing and quoting systems of Business+Center. There are several new features with Version 9.0 to support this integration of billing, invoices, expenses and the business side of support operations.

Starting with version 9.0, you can combine both expenses and time spent billing into a single invoice for customers.

**Adding Expenses to a trouble ticket**

Step 1) First make sure that Expense reporting is enabled. To enable Expense reporting and extended time spent reporting:
   
   - Click on Administration
   - Click on System Administration
   - Click on System Configuration
   - Select the two check boxes in the right hand column – Enable Expense Reporting and Enable Extended Time Spent Reporting
   - Click on Submit to set these options

Step 2) Inside of a Tech+Center trouble ticket, scroll down to the bottom of the ticket. You will see options at the bottom to enter both a Time Spent record and also an expense record for the case. Enter the appropriate information and submit and update the support ticket. Functions inside of the Business+Center can be used to create invoices that pull together expenses and time spent billable hours into invoices.

**Creating Define Fixed Cost Jobs**

In version 9.0, you can pre-define some fixed cost jobs that be selected in the Tech+Center case Expense and Fixed Cost Jobs area.

An example of a Fixed Cost Job might be to Remove a virus and reformat a hard drive. You might have a standard rate for this repair of $65.

To create this fixed cost job, Log into the Business+Center as a configurator level technician:
   
   - Click on Administration
   - Click on Add/Edit Fixed Cost Jobs for expenses
   - Enter the Short description for the job, the cost and optionally a longer description
   - Press Submit
You will now be able to see this Fixed Cost Job in the Tech+Center Expense area as an option to select in addition to directly entering an expense.

Defining Your Business Address and Logo for invoices and quotes

Prior to version 9.0, if you wanted to create, print and email invoices to clients from the Web+Center application, you had to modify a code ASP file directly in the application code. Now this is configurable from the web interface.

To enter your business address and logo image for your invoice:
- Log into the Business+Center
- Click on Administration
- Click on Business Address Info and Logo
- Enter the business/organizational information and attach a JPG logo image that is 100x300 pixels.

Creating and managing Time Spent and Expense Invoices

Now that you have created Time Spent records and Expenses with the Tech+Center ticketing system, you will need to create invoice to bill your customers for those services.

A new option has been added to the Business+Center Invoices menu called

*Create and Manage Case Time and Expense Invoices*

This option is a search engine to find Time spent and expenses and group by customer, company, date or customer and create invoices that can be emailed or printed for direct mailing of invoices for customers. You can select which time spent and invoice records you want to merge into invoices.

Case Templates

Starting in version 9.0 you can more efficiently use defined case templates for work orders where a solution has already been defined by marking another case a template.

For example, if you get a work order ticket on “How do I reset my password?” If you had defined a case Template for this question, you simply click on Templates at the top center of the ticket in the Tech+Center application. Simply select the appropriate template from the list of templates available. Selecting a template for the new case will replace the One Line Description, Case Summary and Case Resolution fields of the defined template. The tech can simply complete the ticket by closing the ticket status and defining the customer notification options or process the ticket as required. All of the repeating typing that would have to go into entering responses in the Case Summary and Case Resolution can now be eliminated.

To Mark a case as a template

- To mark a case a future template, a ticket should closed and the Case Summary and Case Resolution fields should be finalized with clear, polished text describing the problem (Summary) and a clear resolution (Resolution).
- Inside the Tech+Center case form, click on the TEMPLATES button in the top center region below the case number.
- Press the Mark as Template button to mark this case as a future TEMPLATE.

To remove a case as a template
Open up a ticket that is already defined as Template.
Click on the Templates button.
Click on the Remove as Template button to remove this case as a template.

Private Notes

Inside of the Tech+Center there is an upgraded option for the techs to share private (not viewable by the customer) notes about the support work order.

To create a private note, click on the Edit Private Note button. This will bring up a separate pop-up where you can enter a note. The notes are now journaled, timestamped and identifies the technician who wrote the private note.

These private notes can only be edited once submitted by administrator level technicians or higher.

Click the close button to close the popup window. The private note will appear in the Tech+Center case form once you refresh the case ticket in the Tech+Center.

Add additional customers to a case

Web+Center Version 9.0 has an upgraded interface to add and manage additional customers assigned to a ticket.

Multiple customers can now be assigned to a ticket that provides the additional customers as well the original primary customer with notification options and options to let additional customers update the support ticket from the Customer+Center and customer mobile interfaces.

To add an additional customer to a ticket, click on the Add Customer To Case button and a popup window provides a search and add/remove customer assignment option. The list of additionally assigned customer will not be displayed until the case is refreshed.

Geolocation options

Starting with Version 9.0, you can now record and view geolocation coordinates for Techs, Customers, and assets. This is a brand new feature that will still being developed and not all features will be fully developed in the first 9.0 release.

Most desktop and laptop do not have GPS enabled devices with them so the geolocation determined by looking at your network address is not that accurate. To get much more accurate geolocation results, set your geolocation coordinate with a mobile device (phone or tablet) that has a GPS feature available.

To configure geolocation options:

- Click on Administration
- Click on System Configuration Menu
- Click on Geolocation Configuration

There are four checkboxes to enable and/or force geolocation authentication for customers or technicians.

- Tech geolocation enabled
- Require Tech geolocation authentication
Customer geolocation enabled
Require Customer Geolocation authentication

NOTE: Newer versions of Google Chrome browser require that the server running the Web+Center geolocation feature be a secure HTTPS server. This is a restriction applied by Google and their browser so a different browser may be required by the client if you are running Web+Center on an unsecured server.

To set/reset a tech geolocation coordinate in Tech+Center

- After you log into the Tech+Center, click on the My Location menu option available in the upper right hand corner of the Tech+Center screen.
- Click on the update or Clear buttons as required and press the Confirm update location operation.
- To verify your new set location, reload that window and verify the location has been updated with a new date and timestamp.

To set/reset a tech geolocation coordinate in Tech+Mobile

Log into the Tech+Center mobile application
Click on the My Location button in the lower right side
Click on Update or Clear my location as required and press the Confirm Update operation.
Reload that page if needed to view the updated coordinate.

How to View other techs geolocation

If you are dispatcher level technician or higher, you will have a STATUS/TOOLS option in the top menu in Tech+Center.

- Click on the Status/Tool menu option
- If a geolocation has been set for a technician, there will be a clickable location link for each of the techs. Click on the Location link to view their last set or cleared coordination location. If the location is not set, it will display ------.

Asset GeoLocations:

Asset geolocation can be view in the Tech+Center asset information but it can only be set in the Tech+Mobile asset information page to provide better accuracy.

To set an asset geolocation:

- Log into the Tech+Mobile application
- Click on Assets and find the appropriate asset you want to define the geolocation for.
- Expand the Asset GeoLocation options
- Click on the Set/View Geolocation button
- Click on the Update Asset Location or Clear Asset Location and press the confirming prompt

To view the Asset Geolocation in Tech+Center

Open up the desired asset info page with Tech+Center
On the right hand area, click on Show Location link in the Asset Geolocation area on the right hand side.
This should show the last set location with date/time stamp information.

Web+Center Project Searches
Additional options are now available to search and manage Web+Center projects. A Web+Center project is a higher level organization that combines a collection of cases into a “project”. Once a project is defined, you can associate cases to a project. A case's time spent hourly rate/hours and expenses are all continuously calculated toward a project hours and cost.

To enable projects,

- Click on Administration
- Click on System Configuration Menu
- Click on Configuration Options
- Check the Project Management checkbox
- Submit the Configuration Options checkbox

To search for projects

- Click on Projects Button in the left hand button panel
- Click on Search Projects
- You can search by Project Name, Reference #, Status, case number associated with a project, Due Date and Project Leader.

File Download Validation and reporting

To better track attempts when a user downloads malicious files into the Web+Center application, some new modules and API’s are available and installed to check the file extensions of downloaded files.

We have designed a subroutine API called AnalyzeFileDownload() that takes the file name with extension of the file being downloaded and analyzes it for potential severity of concern. This feature is currently configured for customer file downloads.

The Subroutine is defined in the AnalyzeFileDownload.inc file in the language directory and it references the AnalyzeFilesList.inc where one can define the file extension (like *.exe), the potential threat level – 3=known threat, 2 = Potential Threat, and 1 = safe, and lastly the message that will be sent to the configurator level administrator of Web+Center when that file type has been attempted to be downloaded.

When a level 3 type of file is attempted at downloaded, an email notification message is sent and the file is prevented from being downloaded.

The notification email reports various information about the customer account or tech as IP address of the remote host attempting the download.

You can edit and add to this list of potentially dangerous file types by editing the AnalyzeFilesList.inc if you need more files added or add the ability to download and share installation files for your support environments.

When configuring the wcdownload virtual directory, you must make sure that the IIS virtual directory permissions are set to read only.

Secondly, having an anti-virus file checker installed on the server that checks every new file insert into the system is another way to prevent malicious files from being downloaded from Web+Center.

The force geolocation authentication options provide another level of authentication for the system too.
New Cleaner Notification Emails

The notification emails that go out to the customer and the tech have been rebuilt that give a cleaner and less cluttered presentation with unnecessary category and customer information removed. Your company logo is included in the top banner area of the email with options to open up the ticket in either Customer+Center/Customer+Mobile or Tech+Center/Tech+Mobile.

![New Notification email formatting with personalized support options enabled.](image)

Daily Open Case Reminder Email for Techs

To increase productivity of your technicians in terms of completing open cases assigned to them, you can enable a notification email to be sent to each tech daily at a set time that lists open cases assigned to them as a technician and also open cases that are associated with support groups of which they are members.

This feature can be enabled by:

- Click on Administration
- Click on System Configuration Menu
- Click on Open Case Reminder Emails

- You can configure the time of the email notification based on the day of the week or leave blank if you do not want an notification email on a weekend day.

- To launch, click on the Start Open Case Reminders and keep that window open running on the server or another machine. You can also run this function just once from that configuration page.
Bootstrap UI interface and examples

To help you create new Web+Center pages and customizations in Bootstrap and HTML 5 compatible coding with Web+Center styles, we have provided a page of bootstrap documentation and examples and built out customer search and resultant ASP page that uses Bootstrap and Web+Center 9.0 CSS styles. These are available on the System Administration page under Bootstrap Docs and Examples.

Web+Center CSS Editor and Viewing tools

To help you customize the CSS (Cascading Style Sheets) that define the look and feel of most page layout and text styling on Web+Center pages, we have created a WC style test and editor page to let you edit and view changes to WC styles file called wc_style.css. This will assist you in redefining the very specific table and character font based UI changes if needed.

New direct edit options for Case History and Asset History

If you are an administrator level technician, there are now two new options that allow you (not techs) to directly edit the case history journal and Asset history journal. Previously these fields could not be edited by anyone and you would need to delete a case or asset to modify or replace the text in those journaling fields.

These options are available on the System Administration page.

File /Take Photo Download Options For Tech+Mobile case form

The Tech+Mobile application in V8 was missing an important file attachment feature that allows techs to download and attach files to a support ticket. If Tech+Center file download options are enabled under administration, a file download option will now appear on the Tech+Center mobile ticket.

This feature works particularly well on mobile devices since when you select to download a file on a mobile device (tablet or phone), it will give the tech the option to (1) take a photo (2) use an existing photo from PHOTOS or (3) attach a file.

For many support issues, it is every effective to take a photo of a computer screen output or device readouts or cable configurations to help debug an issue.

SMS TEXT Messaging Notification Options

Although SMS messaging existing in V8, we wanted to let folks know about this important option and how to configure it. Getting access to the world’s TEXT SMS network is something that you can’t really do for free and so you will need to get a paid account with Twilio.com. The reason SMS message is locked down is to prevent unlimited TXT spamming from occurring to our phones. Twilio is the provider we have built our SMS API around their gateway and their price for TXT messages is about ¾ of a 1 cent ($0.0070) per MSG and $1/Month for the phone number required to send out a message.

Pricing at:

https://www.twilio.com/sms/pricing

To enable and configure SMS /TXT notification options

- Click on Administration
• Click on System Configuration Menu
• Click on SMS Text Messaging and Notifications
• Enable SMS messaging and enter your phone number and account codes.

This SMS option is helpful for support groups that may need to create a hybrid system of work related notification emails that may not be checked continually plus off hour TXT options on personal/work cell devices. Having a set of configurable message notification options is helpful when your clients or techs have unique communication requirements.

Customer Info Change Journal

One of the original designs for the Web+Center application was to provide customer/contact management features to carefully record contact/customer notes. With Version 9.0, you can enable the Customer Info Change Journal option under

• Click on Administration
• Click on System Configuration Menu
• Click on System Configuration Options
• Check the Customer Info Change Journal checkbox

If a tech makes a change to a customer’s contact information (name, address, phone number, email, etc), it will now be journaled into new table and display area of the customer info page called Customer Change Journal. This option to display this will only appear if there are items in the Change Journal.

To test this feature, first enable it as listed above.

Modify a customer contact field (name, address, email, etc) on the customer information page in Tech+Center

Add some note about the customer in the New Contact Note field as well.

Refresh the customer information page and you should see two expandable areas – Customer Notes (click to view) and Customer Change Journal (Click to View).
Expandable Customer Info Change Journal and Notes areas and quick buttons