

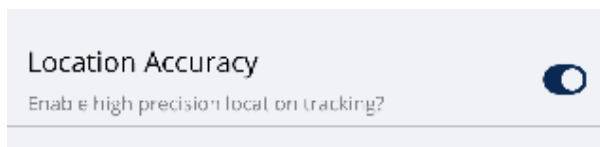
# 7.6.1 Release Notes

## What's New

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## New Features and Enhancements

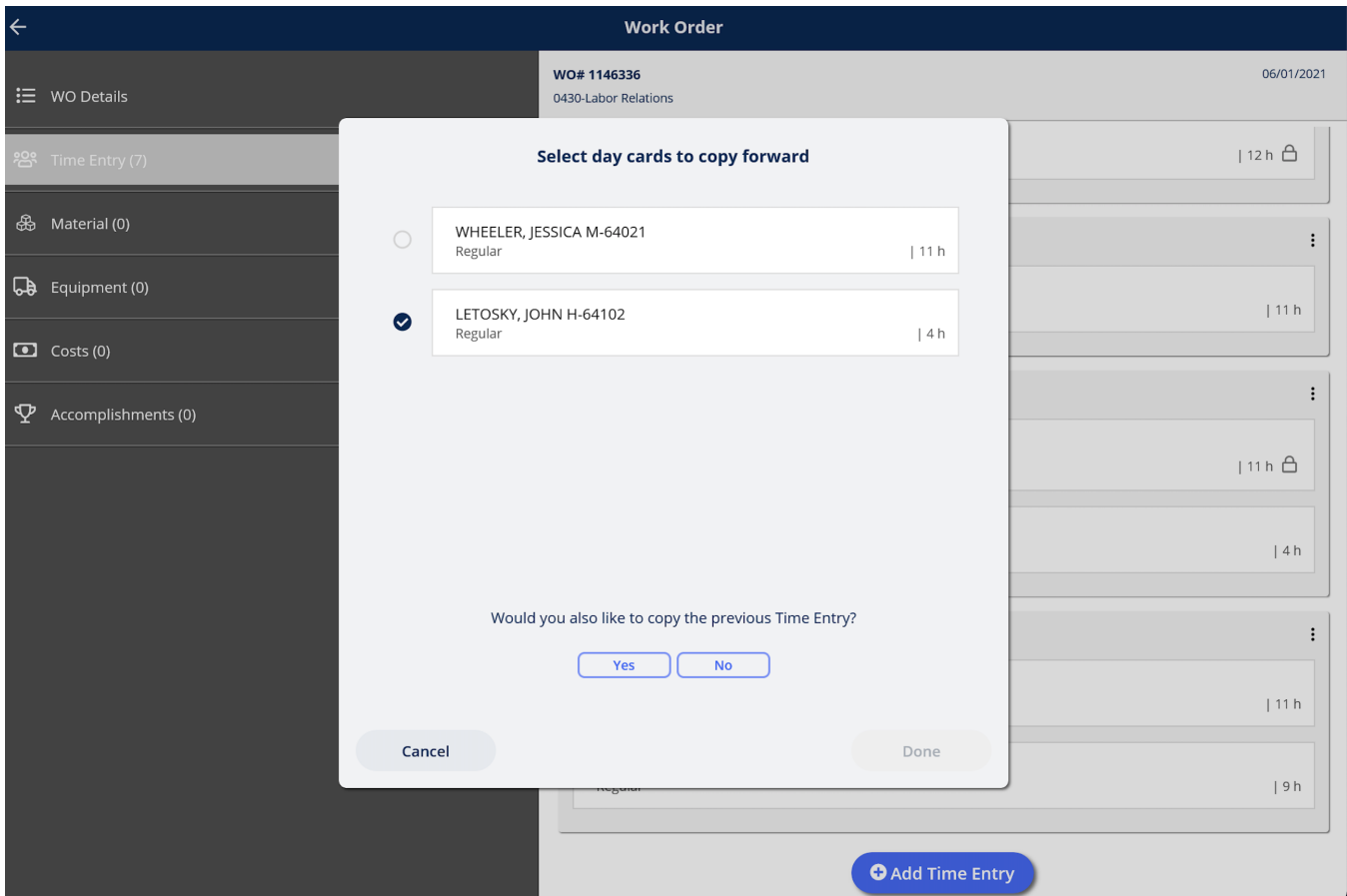
### Work Manager Mobile App



High precision location tracking is now available and users can enable or disable it using the feature toggle. If disabled, the app will use regular precision. High precision allows user's current location to be detected within a few meters. This mode does affect battery usage.

When using the precision location setting, here is how the battery charge depleted:

- iPad Air 2 (MH2P2LL/A) (13.5.1) --> 12% battery reduction over 20 minutes of usage
- iPhone 11 Pro (14.4.2) --> 7% battery reduction over 20 minutes of usage
- Galaxy Tab S2 (SM-T813) (Android 7.0) --> 21% battery reduction over 20 minutes of usage
- DESKTOP-8GPF2OV (64-bit) (Windows 10) --> 48% battery reduction over 20 minutes of usage



For the convenience of users in the field, it is now possible to copy forward a day card to the next day on multi-day Work Orders that have Daycards attached. Users have a choice of copying a Daycard with all its information over to the next day of the Work Order. Some minimal information can be modified while copying over the data.

Reporting Forms now show users a save message when they enter data.

All Work Manager functionality is now supported on phones and tablets except install/remove/replace functionality for Signals Movement and Transfer which is currently only supported on tablets.

## Structures Inspector Mobile App

A time-based automatic logout can now be configured so that when the app is inactive for over the configured amount of time, users are automatically logged out and will need to log back in.

## LRS Gateway

The LRS Gateway sync process is now updated so that Test mode and Full mode always use the same start and end dates. This eliminates the possibility of unreviewed changes coming into the system.

The End Date, indicating the last edit date, can now be entered by the user. This date will usually be calculated as the time of the last edit + 1 second. The Start Date is automatically captured by the job. If the user only runs the job then the end date will default to the current date and time, as previously. In a future release the job will be updated to automatically capture the last edit date from Roads and Highways as well. In order to avoid further missed edits, it is important to ensure that, on Roads & Highways, no edits are committed to DEFAULT for 24 hours before the scheduled time for the Test run. Agencies may want to choose to run the job on a weekend to allow for this edit hiatus.

For instructions on how to run the LRS Gateway Interface jobs, please refer to the [LRS Gateway documentation](#).

## Other Improvements and Bug Fixes

- Added: In Fleet & Equipment Manager, the Available Quantity and Current Quantity are now separate and both visible.
- Added: In Fleet & Equipment Manager, the equipment warranty validation rules now consider additional active and expiration scenarios.
- Added: In Maintenance Manager all hard coded initial values have been removed and local environment values are now used to evaluate the IDs.

- Added: In Maintenance Manager the Work Request Name field in the Work Request data table now accepts values up to 100 characters.
- Added: In Maintenance Manager there is now a Time Entry tab in the Create New / In Progress window.
- Added: In Maintenance Manager users will now be prevented from deleting a Project that has work orders attached to it until after those work orders are deleted and shown an error message to explain why.
- Added: In the Resource module's Material Management window, the Material Reconciliation view is now available and the Transaction History no longer generates an error.
- Added: In the System module, the AMS Configurer now supports the use of Expressions to evaluate and set Column Initial Values to reflect current environment instead of relying on hard coded values.
- Added: In the Work Manager app, WBS field has now been added to Work Orders so users can enter and search using a WBS ID. The field is editable until sync, after which it is locked. (NCDOT)
- Added: The Fleet app and Work Manager app are both dark mode compliant and will work on mobile devices operating in dark mode.
- Fixed: Issue in Fleet & Equipment Manager has been resolved and the Motorpool Reservations no longer relies on a hard coded Asset Type ID for Equipment.
- Fixed: Issue in Maintenance Manager has been resolved and layout and column definitions for pop-up windows now function correctly.
- Fixed: Issue in Maintenance Manager has been resolved and Location attributes are now auto-populated when an Asset with a location is selected in the Work Requests window.
- Fixed: Issue in Maintenance Manager has been resolved and navigating to the Complete window no longer generates an error.
- Fixed: Issue in Maintenance Manager has been resolved and selecting Propagate Children Projects from the In-House Projects window no longer generates an error.
- Fixed: Issue in Maintenance Manager has been resolved and the Accomplishment and Additional Accomplishment fields must be greater than zero when combined in the Total Accomplishment field.
- Fixed: Issue in Maintenance Manager has been resolved and the Asset ID field now supports cross-field filtering by Asset Type on Work Requests, Maintenance Quality Assessment Survey, and Asset Inspection windows.
- Fixed: Issue in Maintenance Manager has been resolved and the calendar defined as "Regular" is now the default but can be changed by the System user.
- Fixed: Issue in Maintenance Manager has been resolved and the Create New / In Progress window no longer generates an error.
- Fixed: Issue in Maintenance Manager has been resolved and the Executables window and the Schedules window now populate correctly.
- Fixed: Issue in Maintenance Manager has been resolved and the Labor, Equipment, and Material tabs of the Daily Log window now populate correctly.
- Fixed: Issue in Maintenance Manager has been resolved and the Make Day Cards From pop-up no longer generates an error.
- Fixed: Issue in Maintenance Manager has been resolved and the Material Stock drop-down list is now populated with materials in the Create New / In Progress window.
- Fixed: Issue in Maintenance Manager has been resolved and the multi-selection wizard now functions correctly in the Work Orders, Annual Work Plan, Contract Plan, and In-House Projects windows.
- Fixed: Issue in Maintenance Manager has been resolved and the Refresh Owner Asset Share View system job now runs successfully and doesn't generate an error.
- Fixed: Issue in Maintenance Manager has been resolved and the right-click menu items in the Annual Work Plan and Desired LOS Plan windows now function correctly.
- Fixed: Issue in Maintenance Manager has been resolved and the Scope Select filter in the Link Work Request to Another window can now automatically read filterable columns.
- Fixed: Issue in Maintenance Manager has been resolved and users can now set work order locations in the Daily Log window.
- Fixed: Issue in Maintenance Manager has been resolved and users can now approve Equipment Day Cards in the Daily Log window and an Operator ID field has been added.
- Fixed: Issue in Maintenance Manager has been resolved and users can now resolve issues in the Conflicting Daycards pop-up in the Create New / In Progress window.
- Fixed: Issue in Maintenance Manager has been resolved and users can now create, populate, and save new asset inspections in the Asset Inspections window.
- Fixed: Issue in Maintenance Manager has been resolved and users can now use the Define Argument(s) pop-up in the Periodic Maintenance by Class Code window to define parameters for a PM trigger.
- Fixed: Issue in Maintenance Manager has been resolved and users cannot save a new Labor Daycard that has the same Employee, Work Date, TRC as an existing Labor Daycard.
- Fixed: Issue in Maintenance Manager has been resolved and users can now run scenarios in the Optimization Analysis window once the required defect Survey, Work History, and Asset Inventory summary data sets are in place and the performance measures and LOS have been defined. The Maintenance Analysis window also now supports estimate and multi-constraint analysis in ANSI Postgres based environments. (TDOT)
- Fixed: Issue in Maintenance Manager has been resolved and users no longer see an error when deleting a Work Request from the Work Requests window.
- Fixed: Issue in Maintenance Manager has been resolved and users will no longer see an error when navigating through Daily Log tabs and the Selected Date field is now ANSI compliant.
- Fixed: Issue in Maintenance Manager has been resolved and when selecting an Asset Location, users will no longer be able to choose a route that is not associated with that asset.
- Fixed: Issue in Maintenance Manager has been resolved and Work Order Start date, Finish Date, and Duration can now be set in the Create New / In Progress window.
- Fixed: Issue in Maintenance Manager has been resolved and work orders can now be shared using the Share with Admin Unit button in the Create New / In Progress window.
- Fixed: Issue in Maintenance Manager has been resolved with the addition of a Resource Shortlist and logging in no longer generates an "Error Downloading labor shortlist" message.
- Fixed: Issue in Resources module has been resolved and the Setup Graph Report pop-up now has an Aggregation drop-down and the error messages have been improved.
- Fixed: Issue in Structure Manager has been resolved and all assets within the selected area of the selected type are now highlighted when using the multi-select tool. (NYS DOT)
- Fixed: Issue in System module has been resolved and the Graph Report Builder now functions correctly and is Postgres compliant.
- Fixed: Issue in System module has been resolved and users no longer see an error when they click Edit PM Trigger in the Asset Type window.
- Fixed Known Issue: When a user enters an incorrect username or password in the Work Manager mobile app, the correct error message now appears.

## Known Issues, Limitations, and Restrictions

## Updates

- Version 7.6.1 of the Work Manager app crashes on non-supported iOS version 12.4.8.
- When using the Work Manager mobile app on [Android tablets](#), users are logged out if after tapping the back button twice.
- ESRI 10.8.1 has an existing issue ([BUG-000138399](#)) that will affect users of our Roads and Highways module. They can work around the bug until ESRI resolves it by using the Relocate Events tool from the Location Referencing Tools.tbx located in the installation directory C:\Program Files\ArcGIS\LocationReferencing\Server10.8\ArcToolBox\Toolboxes when creating the GP Tool.

## Existing Known Issue

- In Work Manager, when adding a new Work Request an error appears if the name is more than 20 characters long. (KYTC)
- In Signals, when selecting multiple assets with the multi-select tool on the bound map, it will sometimes not select all the assets within the selected area. After selecting assets and moving them on the map, users may have to click in the general map area to complete the action. Users will also need to click on the new **Edit** button on the map to complete the edit process. To select another single asset afterwards, users need to switch from the multi-select mode back to the **Arrow** tool. (NYS DOT)
- On mobile apps running on Windows, when using the device's camera to scan a barcode, the app will crash if the app has not previously been given access to the camera and the device is rotated.
- In Firefox, User Update and Date Update aren't displaying for added elements in Tunnels.
- Work Manager validation checks for Work Logs aren't currently working.
- Users cannot view all warranties attached to a Repair Order if one of them has an empty Name or Warranty Rule field in the Fleet Maintenance Manager App.
- In the Work Manager app, two location cards created for the same asset and the same date currently share Work Logs. Work logs created, edited or deleted on one will be reflected on the other card. The Web Application does not allow duplicate Location cards for the same Date and Asset, so if a duplicate is created on Work Manager by mistake, it can be easily deleted on the Web application or on Work Manager.
- Repair Orders are currently taking longer than usual to load in the Fleet Maintenance Manager app.
- In the Fleet Maintenance Manager app, the Date selector is cropped in landscape mode on small devices.
- Delete is not available in in the Fleet Maintenance Manager app.
- Direct Cost Quantities are rounded or truncated if too large to display in the Fleet Maintenance Manager app.
- Direct Cost Activity cannot be updated to None if it has previously been set with a different value in the Fleet Maintenance Manager app.
- The Return to Repair Order button has been removed from the Fleet Maintenance Manager app but it will be re-introduced in a future version of the app. It is temporarily less convenient to return to the repair order page from a page branching off of it but still possible to navigate back by tapping the back arrow in the app.
- Changing Warranty Rules does not currently reset unsaved values on Repair Orders in the Fleet Maintenance Manager app.
- The Repair Order Number is currently missing from the header of drop-down lists in the Repair Order screen in the Fleet Maintenance Manager app.
- Admin Unit must still be selected even if only one is available in the Fleet Maintenance Manager app.
- Time Spent does not currently support 2 decimal places in the Fleet Maintenance Manager app.
- The Type of Service drop-down in the Fleet app and Equipment Work Class drop-down on the web are not currently synced.
- Lists are not using the full screen space in Admin Units and Daycards in the Fleet Maintenance Manager app - the lists can still be scrolled in their entirety so no functionality is lost.
- The Mileage field is not following digit parameters for Repair Orders in the Fleet Maintenance Manager app.
- Labor and Equipment daycard statuses are not syncing correctly between the web and the Fleet Maintenance Manager app.
- Direct Costs are not updating correctly when Description or Part Number exceed 100 in the Fleet Maintenance Manager app.
- In the Structures Inspector mobile app, the Inspection Date field has been removed from the general form. It will be added back with a validation check for past due inspections.
- In Work Manager, when users update from version 7.5.2 to 7.5.3, they should perform a sync when they first login.
- In Fleet & Equipment Manager, it is currently possible to delete all the equipment from an equipment purchase and then have that purchase approved.
- The Work Manager mobile app can crash if the device screen is rotated during sync.
- The Work Manager mobile app, after a Work Request is created it must be synced before the app will allow users to create Work Orders for it.
- In the Structures Inspector mobile app, in certain network connectivity conditions where a sync of an inspection with attachments from the structures inspector mobile app fails, a subsequent successful sync of the app may cause element condition state notes to be duplicated.
- In the Work Manager mobile app, some thumbnails for uploaded photographs added to an inspection rotate 90°.
- In the Work Manager mobile app, assets cannot be setup to view in the app as View Only. They need have the necessary geometry information and assets set to allow editing and inspection creation.
- In the Work Manager mobile app, only one currency symbol (\$) is currently supported.
- In Work Manager and Maintenance Manager, photographs added to an Inspection do not display in the app on some Android devices. This issue is device specific.
- In Maintenance Manager, it is currently possible to create an inspection without entering an Inspection Date. If no date is selected, when syncing the inspection to Work Manager, it will default to 01/01/01 on Work Manager.
- In Structures Inspector, when the Tunnel inventory screen is displayed, **Revert Edits** is briefly shown and then hidden along with **Edit Tunnel**.
- Structure Inspector inspections for Tunnels can currently be edited after being submitted.
- Work Manager App users on Android devices with memory of less than 2GB may receive an Out of Memory Exception. Please close and reopen the app daily to avoid this issue.
- The Structures Inspector mobile app Condition State comment text box covers the title.
- The supplied CORS filter for Tomcat will not work on Tomcat version 8.5.32 and above. Customers need to review the use of the CORS filter and update web.xml as needed. Additional information can be found at <https://tomcat.apache.org/tomcat-8.5-doc/config/filter.html>
- As of Chrome 71, browser pop-ups may be blocked which will negatively affect system operations. To address this in Chrome go to Settings > Advanced > Content Settings > Pop ups and redirects and then add the URL for the application.
- The new GIS Explorer like all web mapping applications requires datasets in the geographic coordinate system (EPSG:4326), so customer schemas with data stored in a different coordinate system would need to be transformed in order for map layers to be created from the dataset. See the section on re-projecting geometries in the [Implementation Guide](#)
- Inserting a location or inventory item from a map is not functional when using Firefox as your web browser. To work around this limitation, use the other supported web browsers: IE 11, Chrome or Safari
- When you select to print a map as an image (png file) using Firefox as your web browser, the file is downloaded as map.png.pdf. You would have to manually edit out the '.pdf' extension from the file name, after the file has been downloaded, to be able to open/use the file
- When you define a map print template of size 34x44 or larger, an error is returned since the size of the generated map image always times before a PDF for printing is generated

- While working on the GIS Interface and performing tasks that does not generate a request to the server (such as styling a map), your user session may expire as a result. The configured session expiration warnings will be displayed when this occurs or your session may timeout and a session expiration notification displayed, if a warning is not configured
- Map filter value does not get pre-populated in the Jasper report print template, even though the parameter is specified for display in the template
- Map filter value cannot be defined or edited for a map with a specified area of interest. To work around the definition limitation, the map filter should be defined before the AOI is set
- A map's layer style settings become null and un-editable, when an applied filter is partially applicable or not applicable to the defined styling attribute values for the map
- On a map bound to a data window, some items when selected on the map aren't highlighted in the data window because they aren't present there (In a data window, items can be Access Regulated), but on the map all inventory items are displayed
- The loading and display of maps and associated styles in IE 11 is not as performant as Chrome, Firefox and Safari
- In the Roads & Highways interface, routes with curves are not handled properly by the ESRI FDGB API. A workaround is to have the agency densify the routes to turn the curves into line strings
- The HTML5 based copy/paste functionality has limitations on the number of rows that can be copied to a browser's clipboard
  - IE 11 - 4000 rows
  - Edge - 4000 rows
  - Chrome - 400 rows
  - Firefox - 1000 rows
  - IE or Edge on a Surface Tablet - 15 rows
- When you select to copy rows from a data window, data from hidden columns on the window are also copied to the clipboard
- The spinner indicating that a layer is loading in the GIS Explorer, continues to spin after selecting to remove a previous loading layer by using either the new map or remove layer option
- When zoomed in at the 0.6km/0.4m level before selecting to print a map, the basemap is not rendered on the resulting printed map
- Hebrew and other languages with special characters are not rendered properly on the properties panel of GIS Explorer
- GIS Explorer does not display the contents of the screen for a right to left language setting
- The owner of a GIS catalog folder no longer has access to the catalog, when the folder is shared by a GIS admin with administrative units that the owner of the folder does not belong to
- A map built from an image service is not rendered in the printed document (PDF or PNG) when select to print the map
- An image layer is not displayed on the map when change the basemap from the 'None' option to any other basemap option
- A map comprised of layers from multiple sources including an image service, does not display the layers in the correct z-order when the layers are re-ordered
- For some monitor resolutions, opening the messages dialog while the GIS Explorer window is open results in the messages dialog to be partially hidden
- In FDC, when enter an incorrect password twice and then enter the correct password afterwards, a message indicating an incorrect reCAPTCHA answer is displayed
- When the same editable layer is added to GIS Explorer so there are more than one active, the features on the layer cannot be dragged for an edit
- The undo/redo of edits retains the actions performed even the associated layer has been removed
- When add a new editable layer to a map with in-progress edits, the undo and redo options are temporarily disabled. Performing an edit re-enables undo/redo and previous edits can be undone or redone
- In Microsoft Edge, some admin units in the Admin Units drop-down on the inspection team's creation dialog, appear as actionable links
- Setting some columns as fixed in a data window is not functional in IE 11
- Setting of columns as fixed in a data window is not supported in right to left language displays, such as for Hebrew or Arabic, i.e. only the left most columns can be fixed
- GIS Explorer does not display a basemap nor the basemap selection dialog, when using Microsoft Edge web browser. However, basemaps function as expected with IE 11, Chrome and Firefox web browsers
- There is an issue in ESRI ArcGIS Enterprise 10.6.1, that prevents the publishing of services for Oracle tables or views with a geometry column owner of MDSYS. When the ESRI issue is addressed, we will test and ensure that the functionality has been restored

## Supported Third Party Applications, Versions, and Specs

	Platform	Version	Notes
<b>Application Server</b>	Apache Tomcat	8.5, <a href="#">9</a>	
<b>Java</b>	Oracle Java SE	11	
	*Zulu JDK Oracle JDK OpenJDK	<a href="#">1.11</a>	Zulu JDK is the preferred JDK.
<b>Web Browsers</b>	Internet Explorer	11	Microsoft will stop supporting Internet Explorer on August 17th, 2021 and Agile Assets will stop supporting it on June 15th, 2022 for all versions of the application.
	Edge	81	
	Chrome	910.4472	
	Firefox	88.0	Extended Release versions are supported.
	Mobile Safari	iOS 14.X	
<b>Database Servers</b>	Oracle Enterprise Edition	12c 18c 19c	Requires OJDBC8 driver

	PostgreSQL	9.5 9.6	
<b>Server Operating Systems</b>	MS Windows Server	2008 R2 64-bit or newer	
	Red Hat Enterprise Linux	5, 6, 7	
<b>Reporting</b>	Jaspersoft, iReport	6.X	Beginning with release 7.6.1, Jasper Reports 4.X will no longer be supported.  We recommend only building new reports with Jasper 6.x.
<b>Mobile Apps</b>	iOS	13 or higher	
	Android	7 (API 10) or higher	
	Windows	10 Universal Windows Platform	The Materials Manager app is not supported on Windows 10 or Android.  1909 - 19H2 - November 2019 Update - build 18363 or higher is recommended
<b>LRS Interface</b>	ESRI ArcGIS Enterprise	10.6	
	ESRI Roads & Highways	10.6, 10.8, 10.8.1	ESRI 10.8.1 has an existing issue ( <a href="#">BUG-000138399</a> ) that will affect users of our Roads and Highways module. They can work around the bug until ESRI resolves it by using the Relocate Events tool from the Location Referencing Tools.tbx located in the installation directory C:\Program Files\ArcGIS\LocationReferencing\Server10.8\ArcToolBox\Toolboxes when creating the GP Tool.
<b>Application Deployment</b>	Docker	18, 19, 20	
<b>Recommended Minimum Device Specs</b>	Tablets	Work Manager Fleet Structures Inspector	<ul style="list-style-type: none"> <li>• iOS, Android, or Windows</li> <li>• Screen Size: 7 inch</li> <li>• Camera resolution: 8MP</li> <li>• Internal memory: 4GB</li> <li>• Device storage: at least 16GB, with a minimum of 4GB available</li> </ul>
	Smart Phones	Fleet	<ul style="list-style-type: none"> <li>• iOS or Android</li> <li>• Screen Size: 5.8</li> <li>• Camera resolution: 23MP</li> <li>• Internal memory: 3GB</li> <li>• Device storage: at least 64GB</li> </ul>
	Desktop	Web applications	<ul style="list-style-type: none"> <li>• All operating systems</li> <li>• System RAM: 4GB</li> <li>• Processor Speed: Single Core 2 Ghz</li> <li>• Processor Type: 64 bit</li> <li>• Screen Resolution: 1024 X 768</li> </ul>