

Keyscan Aurora Software

What's new in Version 1.0.21

AURORA CLIENT

- Added new support for thyssenkrupp Virtual Elevator Integration.
- Added new support for ButterFlyMX Telephone Entry Integration.
- Added new features that allow dormakaba BEST integrated offline locks customers to create Guest cards for a person based on a specific Guest room in the new Room Availability Search screen and on the Edit Person page when adding a new BEST credential.
- Added ability to specify regional time zone when running Transaction Report with local regional time zone set as the default.
- Added ability to save scheduled Transaction Report to the selected directory.
- Added missing transaction types in Transaction Report when transaction type in Quick Action combo box or Similar Transactions check box is selected.
- Added the ability to save scheduled People Information Report to the selected directory.
- Added the ability to include person type in People In/Out Report.
- Added the ability to include up to two common optional fields in People In/Out Report.
- Added the ability to filter by person type in Bulk Update Credentials.
- Added person optional field filter to Bulk Update Credentials
- Added the ability to reassign a dormakaba BEST integrated offline locks guest card from an existing person in Aurora to another person in Aurora.
- Added First Usage Report that lists person and their credentials with their first access granted transaction for the day on a single reader within a date range.
- Added ability to include person type and up to two common optional fields in Alarm Watch Report.
- Added ability to import Custom Person Identifier when importing people.
- Changed the dormakaba E-Plex integrated locks Tamper Count default setting value to 6.
- Changed the dormakaba E-Plex integrated locks Shunt Timer Count description to Tamper Lockout.
- Changed the dormakaba E-Plex integrated locks Tamper Lockout default setting value to 5.
- Changed the dormakaba E-Plex integrated locks signal strength names changed to Very Good, Good, Unacceptable.
- Changed Event Settings to work with schedules other than 24 hours for intrusion devices.
- Changed message when adding legacy video devices.
- Changed dormakaba BEST reports menu to be hidden if there is no equipment in the system.
- Changed optional field column header (if included) in csv export of Transaction Report to match header description.
- Removed the requirement in System Log Report that the site needs to be selected if Include system logs across all sites check box is selected.
- Removed the unknown status from E-Plex door contact. The default status will be closed (normal) and will update transactions as required.
- Modified the process of adding default holiday off times to ensure that holiday default off times are applied correctly in all Aurora products.

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- Modified the hardware menu to better organize the items.
- Allow the entering of IP address as Aurora database server location on a computer where database is installed.
- Corrected separating of report pages by surname when Alarm Watch Report is sent by an e-mail.
- Corrected a backwards compatibility issue for databases created with Aurora v1.0.20.0.
- Corrected a problem that displayed a guest card as having access to a guest door that has been deleted and not yet purged from the system.
- Corrected a problem that occurred when cancelling an add-BEST-card operation that resulted in an unexpected error message appearing.
- Corrected a validation error on saving holidays when a recurring holiday has already been saved and you have selected a manual holiday date.
- Corrected issue of Alarm Watch Report not shown in the Reports menu for the user with View Alarm Watch permission but without Run Reports permission.
- Corrected issue of Lockdown Access add and remove actions being visible in Bulk Update Credentials when enhanced lockdown license is not registered.
- Corrected a problem that prevents the Block Load feature from loading BEST credentials with card numbers larger than 65535 due to incorrect validation for BEST card numbers.
- Corrected a problem that prevents BEST guest cards from being used as master cards which causes the BEST export to fail.
- Corrected issue of Transaction Report not filtered by selected elevator cabs.
- Corrected a problem that prevents the BEST export from executing when Large Card Hex or Large Card Decimal credentials have been added to the system.
- Updated online help and support documents.

AURORA WEB CLIENT

- Corrected a problem that prevented the same time value for default holiday off times to be applied to all 3 holiday types
- Corrected a problem that was incorrectly applying the value supplied for a credential's Has Lockdown Access as the Is Active property during editing.

AURORA DATABASE MAINTENANCE

- Modified Database Maintenance application to not use a Client License during login process.

AURORA COMMUNICATIONS

- Added support for Virtual Elevators (KONE & TKE)
- Combined KONE Communications with TKE to have a new Aurora Virtual Elevator Communication service.

AURORA AGENT

- Modified Agent to look at E-Plex Door battery status to create transactions as necessary. This will happen once a day with all other processes that happen once a day in the Aurora Agent.

AURORA MIGRATION TOOL

- Serial connected DSC panels are now migrated as networked with defaulted settings.
- Help is launched when the application is launched and upon migration completion.
- Updated wording of the migration completion message.
- Updated online help.

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AUROA ENHANCED LOCKDOWN

- Corrected an issue when trying to run Aurora Enhanced Lockdown from a remote computer where it would not connect to Aurora database.

AURORA SDK

- Added the LastUpdate property to the AuroraPerson class.
- Added the GetPersonOptionalFieldInformationDirect method to retrieve person optional field information using direct methods.
- Added support for dormakaba E-Plex integrated locks hardware.
- Corrected a problem in the FindPeople method that automatically disposed of AuroraPerson instances that were found in a previous search and were not found in the current search.
- Corrected a problem that resulted in an ArgumentNullException being thrown when accessing IOCB Inputs and IOCB Outputs properties for an Access Control Unit (ACU) that does not support IOCBs (for example, an ACU150).
- Corrected a problem that prevented the same time value for default holiday off times to be applied to all 3 holiday types while adding or editing an AuroraSchedule.
- The AuroraPerson's Dispose implementation was modified to ensure that when an AuroraPerson's underlying resources have been disposed, the class disposes of itself.
- The AuroraPerson's Dispose implementation was modified so that disposed instances of the class throw an ObjectDisposedException if any of its properties or methods are accessed.
- The AuroraCredential's Dispose implementation was modified so that a disposed instance of the class throw an ObjectDisposedException if any of its properties or methods are accessed.
- The AuroraSite class disposes of any schedules that it detects that were deleted to maintain current data and release any resources that are no longer valid.
- The AuroraSchedule class now throws an ObjectDisposedException upon accessing any properties (other than the ID property) or methods of a disposed instance of the class.
- The AuroraScheduleSettingsBySite class now throws an ObjectDisposedException upon accessing any properties or methods of a disposed instance of the class.
- The AuroraScheduleSettingsBySite class's ID property is marked as Obsolete since the class cannot be uniquely identified through this property.
- The AuroraScheduleSettingsBySite class's dispose method was updated to release all inner members for cleanup.
- Modified the AuroraSite's SaveSchedules method so that it throws an error in the case when the schedule that was being saved was deleted by another user.
- Added the following classes to support E-Plex integrated lock functionality.

> AuroraEPlexDoor class was added to provide information about an E-Plex door and its status.

This class also provides functionality to perform door operations including:

- DisableLockdown: Removes all of the dormakaba E-Plex lock doors associated with this door group from a lock-down state and waits the amount of seconds specified as the refreshWaitTime before refreshing the E-Plex doors status information.
- EnableLockdown: Enables lock down for all of the E-Plex doors associated with this door group and waits the amount of seconds specified as the refreshWaitTime before refreshing the E-Plex doors status information.

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- Lock: Locks the door and waits the amount of seconds specified before refreshing the door's status.
- Pulse: Pulses the door and waits the amount of seconds specified before refreshing the door's status.
- RefreshStatus: Refreshes the door's status information.
- RevertToScheduleAssigned: Sets the door's locked/unlocked state according to the schedule assigned to the door and waits the amount of seconds specified before refreshing the door's status.
- Sync: Synchronizes the E-Plex door settings.
- SyncClock: Synchronizes the clock time on the E-Plex Lock.
- Unlock: Unlocks the door and waits the amount of seconds specified before refreshing the door's status.

> The following are the properties of the AuroraEPlexDoor group:

- ID: The unique ID assigned to the E-Plex Door.
- Name: The name of the E-Plex door.
- Gateway: The gateway the E-Plex door is connected to.
- LockDownStatus: Indicates the unit's lock-down mode.
- AlarmStatus: Indicates the alarm status for the E-Plex door. If this value is "Warning" it means that there the E-Plex door is being held open.
- ParentDoorGroup: The door group that the E-Plex door belongs to.
- Status: Indicates the E-Plex door's locked/unlocked status.
- StatusReason: Indicates the reason for the E-Plex door's status.
- SyncRequired: Indicates if the E-Plex door needs to be synchronized.
- TroubleStatus: Indicates the type of trouble that the door has encountered if there is any trouble with the E-Plex door.

- The AuroraEPlexDoorGroup class was added to provide a means to view information about E-Plex door group. It also provides a means to control the status of the doors assigned to the door group.

The following are the properties of the AuroraEPlexDoor group:

- Doors: Returns the E-Plex doors that are in the door group.
- Error: Returns any errors that have occurred while editing.
- ID: The unique ID assigned to the Door Group.
- Name: The name of the door group.
- Schedules: The E-Plex schedules for the E-Plex doors in the Door Group
- Site: The site the door group belongs to.

The following are the methods available for a Door Group:

- DisableLockdown: Removes all of the E-Plex doors associated with this door group from a lockdown state and waits the amount of seconds specified as the refreshWaitTime before refreshing the E-Plex doors status information.
- EnableLockdown: Enables lock down for all of the E-Plex doors associated with this door group and waits the amount of seconds specified as the refreshWaitTime before refreshing the E-Plex doors status information.

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- LockAll: Locks all of the E-Plex doors associated with this door group and waits the amount of seconds specified as the refreshWaitTime before refreshing the E-Plex doors status information.
- Refresh: Refreshes the door group.
- UnlockAll: Unlocks all of the E-Plex doors associated with this door group and waits the amount of seconds specified as the refreshWaitTime before refreshing the E-Plex doors status information.

- The AuroraDoorGroupScheduleSettings class was added to provide a means to view information about the schedules assigned to an E-Plex door group and how they are used by the doors within the door group

The following are the properties of the AuroraDoorGroupScheduleSettings class:

- ParentDoorGroup: The E-Plex door group that the schedule settings pertain to.
- PassageMode: The passage mode indicates how (or if) the E-Plex door become unlocked. An E-Plex door could never be set to unlock (none), automatically unlock when the schedule starts (auto), become unlocked after the first authorized credential is presented to the reader (first authorized passage), or only become unlocked when it is manually set (manual keypad).
- Schedule: The AuroraSchedule class that defines blocks of times that are used by the E-Plex doors to restrict or grant access.
- ScheduleOnMode: Indicates the mode that is used (what type of credentials are required) when the schedule is on/active.

- The AuroraEPlexGroupAccessLevel class was added to provide information about an E-Plex Door Group Access Level and be used to edit E-Plex group access levels.

The following are the properties of the AuroraEPlexGroupAccessLevel class:

- EPlexDoor: The E-Plex door that is part of the group access control configuration.
- Error: Returns any errors that have occurred while editing.
- Group: The Group of credentials that is part of the group access control configuration.
- HasErrors: Indicates whether any errors were detected while editing.
- Item: Retrieves the last error that occurred while editing the property provided.
- Schedule: The schedule that defines the times that the group can gain access to the E-Plex door. This property can be set to edit the group access level.
- WasModified: Indicates if the AuroraEPlexGroupAccessLevel has changed.

- The AuroraGateway class was added to provide information pertaining to an E-Plex Gateway.

The following are the properties of the AuroraGateway class:

- EPlexDoors: The E-Plex doors that are joined to the Gateway.
- ID: The unique ID assigned to the AuroraGateway.
- Name: The name of the AuroraGateway.
- Status: Indicates the AuroraGateway's connectivity status as unknown, on line, off line.

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The following are the methods of the AuroraGateway class:

- GetGateways: Retrieves all of the gateways.
- RefreshStatus: Refreshes the AuroraGateway's status information.
- Modified the following classes to support E-Plex functionality.

> AuroraDoorGroupAccessLevel class:

- The Schedule property was modified to report an error upon supplying an E-Plex Schedule as a value for Keyscan hardware.

> AuroraSchedule class:

- The public shared Always property was added to retrieve the special schedule used by E-Plex to indicate 24 hour access.
- The CreateTimePeriod and RemoveTimePeriod methods were modified to ensure referenced E-Plex schedules are not edited.
- The CreateHolidayTimePeriod and RemoveHolidayTimePeriod methods were modified to throw an error if used for E-Plex schedules since holidays are not supported.
- The AddDefaultOffTime, AddHolidayDefaultOffTime, RemoveDefaultOffTime, and RemoveHolidayDefaultOffTime methods were removed since E-Plex schedules do not support Default Off Times.

> AuroraSite class:

- Added the EPlexDoorGroups property.
- Modified the Schedules property so that it includes E-Plex schedules for the site.
- Added the EPlexGroupAccessLevels property.
- Added a CreateSchedule method that takes the type of schedule to create as a parameter and to facilitate creating E-Plex schedules.
- Added the RefreshEPlexGroupAccessLevels method.
- Added the SaveEPlexGroupAccessLevels method.
- Added the UndoChangesToEPlexGroupAccessLevels method.

> AuroraTransactionReport

- Added the EPlexDoorFilters property to filter the transactions return only the E-Plex doors specified in the filter.
- Added the following Enums to support E-Plex functionality.
 - DeviceNetworkStatus
 - EPlexScheduleMode
 - PassageMode

AURORA API

- Added the AuroraFindPeopleMetadata class to return data about the results that are expected to be returned upon searching for people with a specified search criterion. This class was added so that developers can determine how much data exists for the search so that they can make appropriate changes to retrieve realistic amounts of data depending on their needs and system capabilities.

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- Added the AuroralImage class to return information about images and also retrieve raw image data for rendering.
- Added the GetFindPeopleMetadata method so that developers can retrieve information about how much data is expected to be returned based on a search criteria provided. This allows developers to setup paging of data if necessary.
- Added the GetPersonPhotos method to retrieve information about a person's photos (if they have any).
- Added the GetPersonImageData method to retrieve the raw image data of a known person image.
- Added the DeletePersonPhotos method to delete a known person's image.
- Added the UpdatePersonPhoto method to update a person's image with new data.
- Added custom error handling to provide a better means to indicate what went wrong to RESTful consuming applications while also allowing Non-RESTful consuming application to also receive more detailed information about errors that occurred.
- Added the ServiceError data transfer object to relay more details about errors the service encountered while processing a request.
- Added fault contracts, using the ServiceError data contract, to the methods exposed by the IAuroraWebService interface.
- Added the UpdateCredentialSiteSettingsBehaviour Enum
- Added ability to show or not show errors in objects returned in fault details (configured in web.config)
- Added new update methods:
 - UpdatePersonSiteOptionalFields
 - UpdatePersonCommonOptionalFields
 - AddPersonToSites
 - RemovePersonFromSites
 - CreateCredentials
 - UpdatePerson
 - UpdateCredentials
 - DeleteCredentials
- Added support for E-Plex hardware.

- Added the following classes to support E-Plex functionality.
 - AuroraEPlexDoor to provide a means to retrieve E-Plex door details including status.
 - AuroraEPlexDoorGroup to provide a means to retrieve E-Plex door group details.
 - AuroraEPlexDoorGroupScheduleSettings to provide a means to retrieve the schedules assigned to a door group along information about how the assigned schedule affects the E-Plex doors within the door group.
 - AuroraEPlexGroupAccessLevel to provide a means to view and update group access for E-Plex doors.
 - AuroraGateway to provide a means to view gateways in the system along with their status.
- Added the following methods to support E-Plex functionality.
 - GetEPlexDoorGroups gets the E-Plex door groups that belong to a site.
 - GetEPlexDoors gets the E-Plex doors that belong to a door group.

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- GetEPlexDoorGroupAssignedSchedules gets the schedule configurations for schedules assigned to a door group.
- EPlexDoorControl sends a request to lock, unlock, pulse, or set the door to remain unlocked until a specified time.
- EPlexDoorGroupControl sends a request to lock, or unlock all of the doors associated with the Door Group.
- RevertEPlexDoorToScheduleAssigned sends a request to set the E-Plex door's locked/unlocked state according to the schedule assigned to the door.
 - EPlexSyncLock sends a request to synchronize the E-Plex door configuration.
 - EPlexSyncLockClock sends a request to synchronize the E-Plex door clock.
 - GetEPlexGateways retrieves the E-Plex Gateways.
- GetEPlexDoorsAssignedToGateway retrieves the E-Plex doors that are assigned to the Gateway.
 - GetEPlexDoorGroupAccessLevel retrieves the door group access levels.
- UpdateEPlexDoorGroupAccessLevel updates the door group access levels with the group access level information provided.

- Added the following Enums to support E-Plex functionality.
 - DeviceNetworkStatus
 - EPlexScheduleMode
 - PassageMode

- Added lockdown methods for E-Plex and Keyscan hardware:
 - EnableLockdownControlUnit sends a command to put all Keyscan doors that are part of an Access Control Unit into a locked down state.
 - EnableLockdownSiteControlUnits sends a command to put all Keyscan doors that are part of Site into a locked down state.
 - DisableLockdownControlUnit sends a command to remove all Keyscan doors that are part of an Access Control Unit from a locked down state.
 - DisableLockdownSiteControlUnits sends a command to remove all Keyscan doors that are part of Site from a locked down state.
 - EnableLockdownEPlexDoors sends a command to lock down the E-Plex doors provided.
 - EnableLockdownSiteEPlexDoors sends a command to lock down the E-Plex doors in the site provided.
 - DisableLockdownEPlexDoors sends a command to remove the E-Plex doors provided from a locked down state.
 - DisableLockdownSiteEPlexDoors sends a command to remove the E-Plex doors from a locked down state within the site provided.
- Added the RevertDoorToScheduleAssigned method to set a door back to the state it should be in according to the schedule assigned to it.
- Added the GetBankControlUnits method to retrieve a list of elevator control units that are assigned to the elevator bank provided.
- Added the GetSpecificSchedules method to retrieve the schedules that are available within the site, filtered to the type of schedule being looked for.
- Corrected a backwards compatibility issue that would fail to authenticate a user with valid credentials after the Web Service updated the database to the version required to support it until the Web Service was fully unloaded

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and reloaded (restarted) after the update.

- Corrected a problem that reported that the SDK license is not registered when the Aurora SDK Web Service fails to connect to the Aurora Database.
- Corrected a problem that would fail to detect a registered SDK license if the license was registered with Aurora after the Web Service was loaded and accessed until the Web Service was fully unloaded and reloaded (restarted) after the registration.
- Corrected a problem in the AuroraPerson class that would fail to create an instance due a problem in the IsDeleted property
- Corrected a problem in the CreatePerson and SynchronizePerson methods that failed to set/update the person's Custom Unique Identifier property with the value provided and the system is configured to use the feature.
- Corrected a problem that prevented the same time value for default holiday off times to be applied to all 3 holiday types while adding or editing a schedule.

- Modified the login process so that it checks if it can connect to the database before proceeding.
- Modified the AuroraPersonSearchCriteria class to support sort direction, page size, and page offset of search results.
- Modified the SynchronizedPeople method to correct problems applying changes to the Person Type, IsActive, ExtendedEntry, and Accessibility properties. It was also modified to correct problems applying changes to the person's credentials' PIN, and IsActive properties.
- Modified the FindPeople method to improve the amount of time it takes to retrieve and return large amounts of data. It was also modified to accommodate ordering and paging so that large amounts of data can be returned in reasonable sizes and allow the server to properly return the data to the consuming client. Lastly, this method was modified to use techniques that reduce the amount of memory the service uses on the web server when retrieving large amounts of data.
- Modified the FindPerson and FindPeople methods to use the GET method instead of POST.
- Modified the DeletePerson method to use the DELETE method instead of POST.
- Modified the CreatePerson method to use a common code base with other synchronizing and updating methods to update the newly added person's details and their credentials.
- Modified the SynchronizePerson to correct a problem that resulted in a null reference exception if no optional field was provided for synchronizing a person's common optional field information.
- Modified the SynchronizePerson method to correct a problem that prevented the person's site optional fields from being updated.
- Modified the SynchronizePerson method to correct a problem that resulted in a null reference error if the person being synchronized could not be found.
- Modified the FindPerson method to correct a problem finding the requested person if the user's default person search criteria user preference had values that filtered out the requested person.
- Modified the FindPerson method to include an error message when the requested person could not be found.
- Modified the CreatePerson method to correct a problem that failed to create person site optional fields.
- Modified the AuroraPerson Class to prevent the possibility of null reference errors when service accesses the CustomUniqueIdentifier, GivenName, or Surname properties if nothing was supplied.
- Modified the AuroraPersonOptionalField Class to prevent the possibility of null reference errors when service accesses the Site or OptionalFieldID properties if nothing was supplied.
- Modified the AuroraPersonSettingsBySite Class to prevent the possibility of null reference errors when service

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accesses the Site property if nothing was supplied.

- Modified the log on method to avoid problems with multiple users logging into the system at the same time.
- Modified SynchronizePerson method to move person and credential update processing into smaller methods for easier error management and to provide a common code base for all paths that update the person's information and their credentials.
- Modified the FindPerson method to refresh the list of People and try again if the person was not found the first time.
- Modified the CreatePerson and SynchronizePerson methods to overwrite current changes in the database if a concurrency exception was detected.
- Modified all data transfer objects to indicate required elements.
- Modified the CreatePerson and SynchronizePerson methods to overwrite current changes in the database if a concurrency exception was detected.
- Modified the AuroraPersonSearchCriteria class to make every criteria optional including booleans.
- Modified all data contract classes used for data transfer to arrange data logically: required elements, like ID, near the top.
- Changed the GetElevatorGroupAccessLevel method to always return current group access level information.
- Changed the UpdateDoorGroupAccessLevel, and UpdateElevatorGroupAccessLevel methods to improve error message details, including elements causing a problem, when validating or applying the group access level changes requested.
- Changed the SynchronizeSchedule to correct a problem applying holiday default-off times that sometimes failed to apply all of the holiday default-off times for a schedule.
- Changed the GetPersonTypes method to always return current person type information.
- Changed the GetTransactions method apply provided E-Plex door filters.
- Changed the GetControlUnits method to always return current control unit information.
- All methods will return a Forbidden HTTP status in the case that the user failed to authenticate.
- The AuroraElevatorBank class was modified to remove the ElevatorControlUnits property and reduce the amount of information returned with the class. A new method was added to provide you with the means to retrieve the control units assigned to the elevator bank.
- The AuroraTransactionReport class was modified add support for E-Plex door filters.
- The AuroraGroup class was modified add a property that indicates if the group is used for E-Plex locks.
- The order of SOAP elements for many of the data contract objects has been changed for readability and priority purposes making it easier to understand what is required and determine what something represents at a glance.
- To avoid incompatibility problems across the Aurora product line, the underlying components used by the Aurora SDK have been compiled to target an x86 platform. This is especially important to note with using the Aurora SDK Web Service since it needs to be hosted under IIS using an application pool that has 32 Bit applications enabled and an appropriate ASP.NET framework version to support the 4.7.2 .NET Framework version requirement.