# CIMPLICITY Alarm Cast from GE Digital
# Advanced Notification

# Introduction

CIMPLICITY Alarm Cast provides paging and notification services based on CIMPLICITY alarms and events. It delivers real-time status messages to pagers, cell phones, BlackBerry devices, and PDAs.  The Alarm Cast system ties into the CIMPLICITY alarm engine to facilitate the configuration of notification from CIMPLICITY events.  Alarm Cast can be used on standalone CIMPLICITY systems or centralized to a common paging server for larger applications.

# Three Levels of Alarm Cast

Alarm Cast is available in three different levels depending on the needs of your application.

**Alarm Cast Standard** is the best choice for a single SCADA server to provide notification of alarms for that system.  The Standard version also acts as a gateway if you are looking to expand to the Enterprise version.

**Alarm Cast Advanced** adds capabilities for handling multiple CIMPLICITY projects on the same server as well as the ability to perform carrier throttling, send automated summary emails, and more.

**Alarm Cast Enterprise** adds the ability to aggregate notification to a single notification server with the Alarm Cast Standard acting as a gateway.  This is the best choice for large Enterprise applications using multiple CIMPLICITY servers and requiring the most advanced capabilities.  The Enterprise version also adds the ability to perform Alarm Throttling to reduce the unnecessary communications on chattering alarms and other alarm noise conditions.

**Please see the table on the following pages for additional details related to each level of CIMPLICITY Alarm Cast.**

# Alarm Cast Capabilities by Level

| Capability | Alarm Cast Standard | Alarm Cast Advanced | Alarm Cast Enterprise |
|---|:---:|:---:|:---:|
| Configuration from Workbench: Integrated with CIMPLICITY Workbench for easy and quick configuration | ☑ | ☑ | ☑ |
| Support for multiple personal device types (cell phone, pagers, etc.) – Support for different types of devices from the same instance. Alarm outputs include analog/digital two-way radios, email, mobile computers, PA systems, pagers, smartphones and tablets, text-to-speech. Some employees may have pagers, other cell phones, etc. All may share the same Alarm Cast server. | ☑ | ☑ | ☑ |
| Motorola Solutions interfaces: Texting interface to MOTOTRBO Capacity Plus, Conventional and Connect Plus two-way radio systems. Radios without displays may receive audio of the alarm message. Note: Audio requires an additional hardware component and a donor radio for connection. | ☑ | ☑ | ☑ |
| Detailed transaction log: Detailed transaction logs of both connectivity to messaging carriers and actual messages transmitted through the system. May be set by number of days the log file will be kept before being purged, maximum log space, path, etc. | ☑ | ☑ | ☑ |
| Concurrent Device/Modem support: Supports the use of one or more Async modems simultaneously on the same server. Allows for extreme message throughput. In the event Async modems are utilized, the system will manage one or more devices at one time. | ☑ | ☑ | ☑ |
| Distribution Lists:  Server-level distribution lists. Rather than manually selecting the destinations to notify of alarms, distribution lists may be used. Distribution lists for alarm notifications – a collection of devices which can be sent a message with a single transaction. Similar to an email distribution list, a client which initiates a transaction with a distribution list will automatically send the same message to all associated with the list. Users can create rules mapping alarms notification to a responsible hierarchy of Destinations or Distribution Lists. Adding/removing an individual to/from the distribution list greatly simplifies visiting each alarm configuration to perform this edit. | ☑ | ☑ | ☑ |
| Language Filter:  Allows building of customized administrator database of prohibited words. Messages containing any of these words will be rejected from being dispatched. | ☑ | ☑ | ☑ |
| Security Access: Ability to configure with security preventing unauthorized users from changing the alarm dispatch configuration. | ☑ | ☑ | ☑ |
| Alarm Cast Gateway to Alarm Cast Enterprise Server: This feature indicates the Alarm Cast Gateway component can be installed on a project, and it may share the resources/configuration of a centralized alarm cast server. For example, if an SMS modem was used for dispatch at a site with 3 projects on different servers. Rather than have to install the full Alarm Cast configuration on each server, each with its own modem and SIM card, one server would be the master with the modem and the other two would just have the Gateway installed. This would allow those servers to dispatch their alarms via the one SMS modem on the master server. | ☑ | ☑ | ☑ |
| Carrier Throttling:  Throttling capability for excessive transactions to a specific provider. Once this limit is reached, all messages for this provider will be bounded and logged as being dropped due to excessive activity. Messages will continue to be dropped while the level of activity is higher than the limit. Once messages per period drop below the specified trigger limit, the flow of messages will be restored automatically and logged in the sender log. This can aid in sites where the carrier shuts down customers if sees as abusing their network with unplanned high transaction rates. | | ☑ | ☑ |
| Multiple Project Support:  Ability to handle multiple CIMPLICITY projects on the same server | | ☑ | ☑ |
| Email Summaries:  Ability to send automated summaries of transactions per messaging provider on a daily basis. These would be used by the Alarm Cast administrator to gauge system performance. | | ☑ | ☑ |
| Security Access Control:  Ability to lock Destinations and Distribution Lists on a user level including signature and disable from being edited, options available for the User signature (User Entered, Authenticated User, Environment Variable) | | ☑ | ☑ |
| Destination Schedules: Destination schedule for alarm notifications. Users can create rules mapping alarms notification to a responsible hierarchy of Destinations or Distribution Lists. Allows the definition of when a user's device should be notified. Usually tied to their work schedule.  As an example, the user could be set up to allow messaging from 07:00-12:00 Monday-Friday. Any  messages sent to the user would be rejected if outside that time window. The scheduling capabilities are quite elaborate, allowing users to match unique corporate staff scheduling methods. Very useful in a multi-shift plant where all three shifts are configured on an alarm. Depending on the time of day the alarm occurs, only the on-shift staff member will receive it. | | ☑ | ☑ |
| Alarm Throttling: Ability to perform alarm throttling to reduce the unnecessary communications from chattering alarms and other alarm noise conditions. In the event an alarm is activating excessively (for example, a strobing PLC bit), Alarm Cast can be configured to suppress the alarm and disable it. Optionally the disabled state can be enunciated to the Administrator allowing for investigation as to why the alarm rate is so high. | | | ☑ |

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|---|---|---|---|
| Automated Carrier Link Failover:  This feature allows for multiple paths to be set up to one messaging carrier. In the event a provider cannot be connected to, and a failover provider is available, new transactions will be routed to the failover provider, if this option is selected. In addition, existing transactions in the failed provider will be sent to the failover provider. The provider will attempt to connect to the carrier every 30 seconds until the connection can be brought back online. Once online, the provider will begin accepting transactions again, but any transactions in the failover provider queue will remain there and be processed there. | | | ☑ |
| Device Prioritization: Ability to modify the priority of providers that share a device if there is more than one provider for any given device. If multiple providers have the highest priority, the maximum transactions will be processed for each of them, then those of a lesser priority will be processed. | | | ☑ |

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our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry.

## Contact Information

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