

# ShakeCast Documentation 3.0

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# Template Keywords

**Summary:** ShakeCast Notification Template Keywords

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## EVENT Notification Keywords

**Table 1.** EVENT Notification Keywords

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Constant	Description
EVENT_ID	Earthquake identifier e.g., nn00423851
EVENT_VERSION	Integer indicating event version
EVENT_STATUS	ShakeMap status NORMAL: RELEASED REVIEWED CANCELLED:
EVENT_NAME	String name describing event; defined by local network
MAGNITUDE	Event magnitude
EVENT_LOCATION_DESCRIPTION	String name describing event location with geographic reference; defined by local network e.g., “32km WNW of Alamo, Nevada”
EVENT_TIMESTAMP	Event timestamp e.g., yyyy-mm-ddThh:mm:ssZ
LAT	Event latitude (decimal degrees, north)
LON	Event longitude (decimal degrees, east)
EXTERNAL_EVENT_ID	Same as EVENT_ID in V3
NOTIFICATION_ID	Sequence ID in ShakeCast notification table
TRIES	Number of notification attempts.
DELIVERY_STATUS	Result of notification attempt.
SHAKECAST_USER	ShakeCast User ID
DELIVERY_ADDRESS	Email address for delivery
DELIVERY_METHOD	Product delivery type for the given notification EMAIL_HTML: email with html formatting EMAIL_TEXT: plain text email PAGER: simple text message for SMS delivery
EVENT_TYPE	Types of events that will trigger notifications to be sent: ALL: includes all event types (inclusive) ACTUAL: real earthquake SCENARIO: a scenario or converted actual event TEST: system test HEARTBEAT: a heartbeat system test message
NOTIFICATION_TYPE	Types of events that will trigger a notification to be sent Valid notification types: NEW_EVENT: an earthquake exceeding a user-set threshold value. Requires EVENT_TYPE and DELIVERY_METHOD DAMAGE_THRESHOLD_EXCEEDED: a damage threshold has been exceeded

tags.DAMAGE: Triggered when the ground shaking parameter at a facility (or facilities) is between the high and low values of the user-set facility parameters. Requires EVENT\_TYPE, DELIVERY\_METHOD, and DAMAGE\_LEVEL tags.SHAKING: Triggered when the ground shaking parameter at the facility location of the facility exceeds the preset value. Requires EVENT\_TYPE, DELIVERY\_METHOD, METRIC, and LIMIT\_VALUE tags.CAN\_EVENT: cancelled event. Requires EVENT\_TYPE and DELIVERY\_METHOD tags.UPD\_EVENT: updated event. Requires EVENT\_TYPE and DELIVERY\_METHOD tags.NEW\_PROD: triggered when a specific ShakeMap product becomes available. Require EVENT\_TYPE, DELIVERY\_METHOD, and PRODUCT tags.

MESSAGE_FORMAT	Name of notification template (default)
LIMIT_VALUE	Minimum magnitude for a notification to be sent
PRODUCT_TYPE	Type of product to be delivered. If omitted, product is plain text.PDF: PDF from templates
FILENAME	External files to be attached to message
AGGREGATION_GROUP	Notification to be sent based on GROUP type defined by membership in a GROUP. ShakeCast has a predefined CITY group of global cities.
MAX_TRIES	Maximum number of notification attempts.
FACILITY_ID	Unique facility identifier. Text(32)
FACILITY_TYPE	Type of facility. Current defined types are: BRIDGE, CAMPUS, CITY, COUNTY, DAM, DISTRICT, ENGINEERED, INDUSTRIAL, MULTIFAM, ROAD, SINGLEFAM, STRUCTURE, TANK, TUNNEL, UNKNOWN, and HAZUS building types.
EXTERNAL_FACILITY_ID	Organization's unique facility identifier. Text (32)This field must be unique for a facility type but the same external_facility_id may be used for different types of facilities.
FACILITY_NAME	Facility name. Text(128). The value of this field is displayed to the user.
SHORT_NAME	Shortened version of facility name. Text(128).ShakeCast uses the value in this field

	when a shorter version of the name is needed due to output space limitations.
DESCRIPTION	Facility description. Text(255).
FACILITY_LAT	Facility latitude (decimal degrees, north)
FACILITY_LON	Facility longitude (decimal degrees, east)
GEOM_TYPE	The value of this field is used by ShakeCast to handle the geometry coordinates from the geom field. Text(32)Currently defined types are: POINT, POLYLINE, POLYGON, RECTANGLE, and CIRCLE.
GEOM	Geometry of a facility. The value of this field is used specify the coordinates of the facility. Text(32)Format of this field is in (longitude latitude) pairs separated by a white space. The size limit of data is ~16MB.
AGGREGATE	Flag to indicate whether notifications should be combined into a single messageInteger value e.g., 1
SERVER_ID	Identifier of this ShakeCast server
DNS_ADDRESS	Domain name of this ShakeCast server

## PRODUCT Notification Keywords

**Table 2.** PRODUCT Notification Keywords

Constant	Description
PRODUCT_ID	Product sequence ID in ShakeCast database
PRODUCT_TYPE	Type of product to be delivered. If omitted, product is plain text.PDF: PDF from templates
NAME	Short product type description
DESCRIPTION	Long product type description
FILENAME	Filename for the product on local system
GENERATION_TIMESTAMP	Timestamp showing when the product was created on remote or local server
PRODUCT_STATUS	Status of product as RELEASED, REVIEWED, or

## CANCELLED

EVENT_ID	Earthquake identifier e.g., nn00423851
EVENT_VERSION	Integer indicating event version
EVENT_NAME	String name describing event; defined by local network
MAGNITUDE	Event magnitude
EVENT_LOCATION_DESCRIPTION	String name describing event location with geographic reference; defined by local network e.g., “32km WNW of Alamo, Nevada”
EVENT_TIMESTAMP	Event timestamp e.g., yyyy-mm-ddThh:mm:ssZ
LAT	Event latitude (decimal degrees, north)
LON	Event longitude (decimal degrees, east)
SHAKEMAP_ID	Same as the event id
SHAKEMAP_VERSION	Integer indicating map revision
NOTIFICATION_ID	Sequence ID in ShakeCast notification table
TRIES	Number of notification attempts.
DELIVERY_STATUS	Result of notification attempt.
SHAKECAST_USER	ShakeCast User ID
DELIVERY_ADDRESS	Email address for delivery
DELIVERY_METHOD	Product delivery type for the given notification EMAIL_HTML: email with html formatting EMAIL_TEXT: plain text email PAGER: simple text message for SMS delivery
NOTIFICATION_TYPE	Types of events that will trigger a notification to be sent Valid notification types: NEW_EVENT: an earthquake exceeding a user-set threshold value. Requires EVENT_TYPE and DELIVERY_METHOD tags. DAMAGE: Triggered when the ground shaking parameter at a facility (or facilities) is between the high and low values of the user-set facility parameters. Requires EVENT_TYPE, DELIVERY_METHOD, and DAMAGE_LEVEL tags. SHAKING: Triggered when the ground shaking parameter at the facility location of the facility exceeds the preset value. Requires EVENT_TYPE,

	DELIVERY_METHOD, METRIC, and LIMIT_VALUE tags.CAN_EVENT: cancelled event. Requires EVENT_TYPE and DELIVERY_METHOD tags.UPD_EVENT: updated event. Requires EVENT_TYPE and DELIVERY_METHOD tags.NEW_PROD: triggered when a specific ShakeMap product becomes available. Require EVENT_TYPE, DELIVERY_METHOD, and PRODUCT tags.
MESSAGE_FORMAT	Name of notification template (default)
LIMIT_VALUE	Minimum magnitude for a notification to be sent
AGGREGATION_GROUP	Notification to be sent based on GROUP type defined by membership in a GROUP. ShakeCast has a predefined CITY group of global cities.
MAX_TRIES	Maximum number of notification attempts.
FACILITY_ID	Unique facility identifier. Text(32)
FACILITY_TYPE	Type of facility. Current defined types are: BRIDGE, CAMPUS, CITY, COUNTY, DAM, DISTRICT, ENGINEERED, INDUSTRIAL, MULTIFAM, ROAD, SINGLEFAM, STRUCTURE, TANK, TUNNEL, UNKNOWN, and HAZUS building types.
EXTERNAL_FACILITY_ID	Organization's unique facility identifier. Text (32)This field must be unique for a facility type but the same external_facility_id may be used for different types of facilities.
FACILITY_NAME	Facility name. Text(128). The value of this field is displayed to the user.
SHORT_NAME	Shortened version of facility name. Text(128).ShakeCast uses the value in this field when a shorter version of the name is needed due to output space limitations.
DESCRIPTION	Facility description. Text(255).
FACILITY_LAT	Facility latitude (decimal degrees, north)
FACILITY_LON	Facility longitude (decimal degrees, east)
GEOM_TYPE	The value of this field is used by ShakeCast to handle the geometry coordinates from the geom field. Text(32)Currently defined types are: POINT, POLYLINE, POLYGON, RECTANGLE, and CIRCLE.

GEOM	Geometry of a facility. The value of this field is used specify the coordinates of the facility. Text(32)Format of this field is in (longitude latitude) pairs separated by a white space. The size limit of data is ~16MB.
AGGREGATE	Flag to indicate whether notifications should be combined into a single messageInteger value e.g., 1
SERVER_ID	Identifier of this ShakeCast server
DNS_ADDRESS	Domain name of this ShakeCast server

## SHAKING Notification Keywords

**Table 3.** SHAKING Notification Keywords

Constant	Description
SHAKEMAP_ID	Same as the event id
SHAKEMAP_VERSION	Integer indicating map revision
SHAKEMAP_REGION	ShakeMap Network Code
GENERATION_TIMESTAMP	ShakeCast processing timestamp e.g., yyyy-mm-ddThh:mm:ssZ
EVENT_ID	Earthquake identifier e.g., nn00423851
EVENT_VERSION	Integer indicating event version Integer indicating event version
EVENT_NAME	String name describing event; defined by local network
MAGNITUDE	Event magnitude
EVENT_LOCATION_DESCRIPTION	String name describing event location with geographic reference; defined by local networke.g., “32km WNW of Alamo, Nevada”
EVENT_TIMESTAMP	Event timestamp e.g., yyyy-mm-ddThh:mm:ssZ
LAT	Event latitude (decimal degrees, north)
LON	Event longitude (decimal degrees, east)
NOTIFICATION_ID	Sequence ID in ShakeCast notification table

TRIES	Number of notification attempts.
DELIVERY_STATUS	Result of notification attempt.
DELIVERY_ADDRESS	Email address for delivery
METRIC	ShakeMap metric for the shaking value
GRID_VALUE	ShakeMap shaking value
DELIVERY_METHOD	Product delivery type for the given notification EMAIL_HTML: email with html formatting EMAIL_TEXT: plain text email PAGER: simple text message for SMS delivery
NOTIFICATION_TYPE	Types of events that will trigger a notification to be sent Valid notification types: NEW_EVENT: an earthquake exceeding a user-set threshold value. Requires EVENT_TYPE and DELIVERY_METHOD tags. DAMAGE: Triggered when the ground shaking parameter at a facility (or facilities) is between the high and low values of the user-set facility parameters. Requires EVENT_TYPE, DELIVERY_METHOD, and DAMAGE_LEVEL tags. SHAKING: Triggered when the ground shaking parameter at the facility location of the facility exceeds the preset value. Requires EVENT_TYPE, DELIVERY_METHOD, METRIC, and LIMIT_VALUE tags. CAN_EVENT: cancelled event. Requires EVENT_TYPE and DELIVERY_METHOD tags. UPD_EVENT: updated event. Requires EVENT_TYPE and DELIVERY_METHOD tags. NEW_PROD: triggered when a specific ShakeMap product becomes available. Require EVENT_TYPE, DELIVERY_METHOD, and PRODUCT tags.
MESSAGE_FORMAT	Name of notification template (default)
LIMIT_VALUE	Minimum magnitude for a notification to be sent
PRODUCT_TYPE	Type of product to be delivered by the specified DELIVERY_METHOD. Products include PDF: GRID_XML PGA_JPG INTEN_JPG
FILENAME	External file to be attached to message
AGGREGATION_GROUP	Notification to be sent based on GROUP type defined by membership in a GROUP. ShakeCast has a predefined CITY group of global cities.



MAX_TRIES	Maximum number of notification attempts.
FACILITY_ID	Unique facility identifier. Text(32)
FACILITY_TYPE	Type of facility. Current defined types are: BRIDGE, CAMPUS, CITY, COUNTY, DAM, DISTRICT, ENGINEERED, INDUSTRIAL, MULTIFAM, ROAD, SINGLEFAM, STRUCTURE, TANK, TUNNEL, UNKNOWN, and HAZUS building types.
EXTERNAL_FACILITY_ID	Organization's unique facility identifier. Text (32)This field must be unique for a facility type but the same external_facility_id may be used for different types of facilities.
FACILITY_NAME	Facility name. Text(128). The value of this field is displayed to the user.
SHORT_NAME	Shortened version of facility name. Text(128).ShakeCast uses the value in this field when a shorter version of the name is needed due to output space limitations.
DESCRIPTION	Facility description. Text(255).
FACILITY_LAT	Facility latitude (decimal degrees, north)
FACILITY_LON	Facility longitude (decimal degrees, east)
GEOM_TYPE	The value of this field is used by ShakeCast to handle the geometry coordinates from the geom field. Text(32)Currently defined types are: POINT, POLYLINE, POLYGON, RECTANGLE, and CIRCLE.
GEOM	Geometry of a facility. The value of this field is used specify the coordinates of the facility. Text(32)Format of this field is in (longitude latitude) pairs separated by a white space. The size limit of data is ~16MB.
BOUND_SOUTH	ShakeMap boundary to south
BOUND_NORTH	ShakeMap boundary to north
BOUND_WEST	ShakeMap boundary to west
BOUND_EAST	ShakeMap boundary to east
AGGREGATE	Flag to indicate whether notifications should be combined into a single messageInteger value e.g.,

	1
SERVER_ID	Identifier of this ShakeCast server
DNS_ADDRESS	Domain name of this ShakeCast server

## DAMAGE Notification Keywords

**Table 4.** DAMAGE Notification Keywords

Constant	Description
SHAKEMAP_ID	Same as the event id
SHAKEMAP_VERSION	Integer indicating map revision
SHAKEMAP_REGION	ShakeMap network code
GENERATION_TIMESTAMP	ShakeCast processing timestamp e.g., yyyy-mm-ddThh:mm:ssZ
EVENT_ID	Earthquake identifier e.g., nn00423851
EVENT_VERSION	Integer indicating event version
EVENT_NAME	String name describing event; defined by local network
MAGNITUDE	Event magnitude
EVENT_LOCATION_DESCRIPTION	String name describing event location with geographic reference; defined by local network e.g., “32km WNW of Alamo, Nevada”
EVENT_TIMESTAMP	Event timestamp e.g., yyyy-mm-ddThh:mm:ssZ
LAT	Event latitude (decimal degrees, north)
LON	Event longitude (decimal degrees, north)
NOTIFICATION_ID	Sequence ID in ShakeCast notification table
TRIES	Number of notification attempts.
DELIVERY_STATUS	Result of notification attempt.
SHAKECAST_USER	ShakeCast User ID
DELIVERY_ADDRESS	Email address for delivery
METRIC	ShakeMap metric used for damage assessment

GRID_VALUE	ShakeMap value used for damage assessment
DAMAGE_LEVEL	String parameter for notification to be sent within the damage threshold e.g., GREEN, ORANGE, YELLOW, RED
DAMAGE_LEVEL_NAME	Damage level description
IS_MAX_SEVERITY	Flag showing whether this is the most severe damage state
SEVERITY_RANK	Rank of damage state
LOW_LIMIT	Minimum shaking value of the damage state
HIGH_LIMIT	Maximum shaking value of the damage state
DELIVERY_METHOD	Product delivery type for the given notification EMAIL_HTML: email with html formatting EMAIL_TEXT: plain text email PAGER: simple text message for SMS delivery
NOTIFICATION_TYPE	Types of events that will trigger a notification to be sent Valid notification types: NEW_EVENT: an earthquake exceeding a user-set threshold value. Requires EVENT_TYPE and DELIVERY_METHOD tags. DAMAGE: Triggered when the ground shaking parameter at a facility (or facilities) is between the high and low values of the user-set facility parameters. Requires EVENT_TYPE, DELIVERY_METHOD, and DAMAGE_LEVEL tags. SHAKING: Triggered when the ground shaking parameter at the facility location of the facility exceeds the preset value. Requires EVENT_TYPE, DELIVERY_METHOD, METRIC, and LIMIT_VALUE tags. CAN_EVENT: cancelled event. Requires EVENT_TYPE and DELIVERY_METHOD tags. UPD_EVENT: updated event. Requires EVENT_TYPE and DELIVERY_METHOD tags. NEW_PROD: triggered when a specific ShakeMap product becomes available. Require EVENT_TYPE, DELIVERY_METHOD, and PRODUCT tags.
MESSAGE_FORMAT	Name of notification template (default)
LIMIT_VALUE	Minimum magnitude for a notification to be sent
PRODUCT_TYPE	Type of product to be delivered. If omitted, product is plain text. PDF: PDF from templates

FILENAME	External file to be attached to message
AGGREGATION_GROUP	Notification to be sent based on GROUP type defined by membership in a GROUP. ShakeCast has a predefined CITY group of global cities.
MAX_TRIES	Maximum number of notification attempts.
FACILITY_ID	Unique facility identifier. Text(32)
FACILITY_TYPE	Type of facility. Current defined types are: BRIDGE, CAMPUS, CITY, COUNTY, DAM, DISTRICT, ENGINEERED, INDUSTRIAL, MULTIFAM, ROAD, SINGLEFAM, STRUCTURE, TANK, TUNNEL, UNKNOWN, and HAZUS building types.
EXTERNAL_FACILITY_ID	Organization's unique facility identifier. Text (32)This field must be unique for a facility type but the same external_facility_id may be used for different types of facilities.
FACILITY_NAME	Facility name. Text(128). The value of this field is displayed to the user.
SHORT_NAME	Shortened version of facility name. Text(128).ShakeCast uses the value in this field when a shorter version of the name is needed due to output space limitations.
DESCRIPTION	Facility description. Text(255).
FACILITY_LAT	Facility latitude (decimal degrees, north)
FACILITY_LON	Facility longitude (decimal degrees, east)
GEOM_TYPE	The value of this field is used by ShakeCast to handle the geometry coordinates from the geom field. Text(32)Currently defined types are: POINT, POLYLINE, POLYGON, RECTANGLE, and CIRCLE.
GEOM	Geometry of a facility. The value of this field is used specify the coordinates of the facility. Text(32)Format of this field is in (longitude latitude) pairs separated by a white space. The size limit of data is ~16MB.
BOUND_SOUTH	ShakeMap boundary to south
BOUND_NORTH	ShakeMap boundary to north

BOUND_WEST	ShakeMap boundary to west
BOUND_EAST	ShakeMap boundary to east
AGGREGATE	Flag to indicate whether notifications should be combined into a single messageInteger value e.g., 1
SERVER_ID	Identifier of this ShakeCast server
DNS_ADDRESS	Domain name of this ShakeCast server

# SYSTEM Notification Keywords

Table 5. SYSTEM Notification Keywords

Constant	Description
LOG_MESSAGE_ID	Log sequence ID in ShakeCast database
LOG_MESSAGE_TYPE	Message type in WARNING or ERROR
SERVER_ID	Local ID for this ShakeCast server
DESCRIPTION	Server description
RECEIVE_TIMESTAMP	Timestamp when this notification was requested e.g., yyyy-mm-ddThh:mm:ssZ
NOTIFICATION_ID	Sequence ID in ShakeCast notification table
TRIES	Number of notification attempts.
DELIVERY_STATUS	Result of notification attempt.
SHAKECAST_USER	ShakeCast User ID
DELIVERY_ADDRESS	Email address for delivery
DELIVERY_METHOD	Product delivery type for the given notificationEMAIL_HTML: email with html formattingEMAIL_TEXT: plain text emailPAGER: simple text message for SMS delivery
NOTIFICATION_TYPE	Types of events that will trigger a notification to be sent Valid notification types:NEW_EVENT: an earthquake exceeding a user-set threshold value. Requires EVENT_TYPE and DELIVERY_METHOD tags.DAMAGE: Triggered when the ground shaking parameter at a facility (or facilities) is between the high and low values of the user-set facility parameters. Requires EVENT_TYPE, DELIVERY_METHOD, and

	DAMAGE_LEVEL tags.SHAKING: Triggered when the ground shaking parameter at the facility location of the facility exceeds the preset value. Requires EVENT_TYPE, DELIVERY_METHOD, METRIC, and LIMIT_VALUE tags.CAN_EVENT: cancelled event. Requires EVENT_TYPE and DELIVERY_METHOD tags.UPD_EVENT: updated event. Requires EVENT_TYPE and DELIVERY_METHOD tags.NEW_PROD: triggered when a specific ShakeMap product becomes available. Require EVENT_TYPE, DELIVERY_METHOD, and PRODUCT tags.
MESSAGE_FORMAT	Filename of notification template (default)
LIMIT_VALUE	Minimum magnitude for a notification to be sent
AGGREGATE	Flag to indicate whether notifications should be combined into a single messageInteger value e.g., 1
AGGREGATION_GROUP	Notification to be sent based on GROUP type defined by membership in a GROUP. ShakeCast has a predefined CITY group of global cities.
MAX_TRIES	Maximum number of notification attempts.
SERVER_ID	Identifier of this ShakeCast server
DNS_ADDRESS	Domain name of this ShakeCast server

## Derived Value Keywords

**Table 6.** Derived Value Keywords

Facility Attributes As ATTR_[ATTRIBUTE_NAME]	Description
_ITEMNO	Total number of entries in this notification
NUM[METRIC] (SHAKING/DAMAGE only)	Total number of entries for the specified ShakeMap metric
MIN[METRIC] (SHAKING/DAMAGE only)	The minimum reported value for the specified ShakeMap metric
MAX[METRIC] (SHAKING/DAMAGE only)	The maximum reported value for the specified ShakeMap metric
MEAN[METRIC] (SHAKING/DAMAGE only)	The averaged value for the specified ShakeMap metric

EXCEEDANCE\_RATIO  
(DAMAGE only)

The relative position between the LOW\_LIMIT and  
HIGH\_LIMIT values, normalized to between 0 and 1.

🔍:

**Tags:**

troubleshooting (tag\_troubleshooting)

shakecast\_v3 (tag\_shakecast\_v3)

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