

# GroundSegment Technical DataSheet

API Documentation

September 28, 2016

## Contents

<b>Contents</b>	<b>1</b>
<b>1 Package GroundSegment.models</b>	<b>4</b>
1.1 Modules . . . . .	4
<b>2 Package GroundSegment.models.Alarm</b>	<b>6</b>
2.1 Modules . . . . .	6
<b>3 Module GroundSegment.models.Alarm.Action</b>	<b>7</b>
3.1 Class Action . . . . .	7
<b>4 Module GroundSegment.models.Alarm.Alarm</b>	<b>8</b>
4.1 Variables . . . . .	8
4.2 Class Alarm . . . . .	8
4.2.1 Methods . . . . .	8
4.2.2 Class Variables . . . . .	8
<b>5 Module GroundSegment.models.Alarm.AlarmState</b>	<b>10</b>
5.1 Class AlarmState . . . . .	10
5.1.1 Methods . . . . .	10
5.1.2 Class Variables . . . . .	10
<b>6 Module GroundSegment.models.Alarm.AlarmType</b>	<b>11</b>
6.1 Class AlarmType . . . . .	11
6.1.1 Methods . . . . .	11
6.1.2 Class Variables . . . . .	11
<b>7 Module GroundSegment.models.Alarm.Criticality</b>	<b>12</b>
7.1 Class Criticality . . . . .	12
7.1.1 Methods . . . . .	12
7.1.2 Class Variables . . . . .	12
<b>8 Module GroundSegment.models.CommandType</b>	<b>13</b>
8.1 Class CommandType . . . . .	13
8.1.1 Methods . . . . .	13
8.1.2 Class Variables . . . . .	13
<b>9 Module GroundSegment.models.CommandTypeParameter</b>	<b>14</b>

9.1	Class CommandTypeParameter . . . . .	14
<b>10</b>	<b>Module GroundSegment.models.Consts</b>	<b>15</b>
10.1	Class Consts . . . . .	15
10.1.1	Methods . . . . .	15
10.1.2	Properties . . . . .	15
10.1.3	Class Variables . . . . .	15
<b>11</b>	<b>Package GroundSegment.models.Notification</b>	<b>16</b>
11.1	Modules . . . . .	16
<b>12</b>	<b>Module GroundSegment.models.Notification.AlarmTypeNotificationType</b>	<b>17</b>
12.1	Class AlarmTypeNotificationType . . . . .	17
12.1.1	Methods . . . . .	17
12.1.2	Class Variables . . . . .	17
<b>13</b>	<b>Module GroundSegment.models.Notification.Contact</b>	<b>18</b>
13.1	Class Contact . . . . .	18
13.1.1	Methods . . . . .	18
13.1.2	Class Variables . . . . .	18
<b>14</b>	<b>Module GroundSegment.models.Notification.MessageTemplate</b>	<b>19</b>
14.1	Class MessageTemplate . . . . .	19
14.1.1	Methods . . . . .	19
14.1.2	Class Variables . . . . .	19
<b>15</b>	<b>Module GroundSegment.models.Notification.Notification</b>	<b>20</b>
15.1	Class Notification . . . . .	20
15.1.1	Methods . . . . .	20
15.1.2	Class Variables . . . . .	20
<b>16</b>	<b>Module GroundSegment.models.Notification.NotificationType</b>	<b>22</b>
16.1	Class NotificationType . . . . .	22
16.1.1	Methods . . . . .	22
16.1.2	Class Variables . . . . .	22
16.1.3	Instance Variables . . . . .	22
<b>17</b>	<b>Module GroundSegment.models.Parameter</b>	<b>23</b>
17.1	Class Parameter . . . . .	23
17.1.1	Methods . . . . .	23
17.1.2	Class Variables . . . . .	23
<b>18</b>	<b>Module GroundSegment.models.Pasada</b>	<b>24</b>
18.1	Class Pasada . . . . .	24
18.1.1	Methods . . . . .	24
18.1.2	Class Variables . . . . .	24
<b>19</b>	<b>Module GroundSegment.models.Propagation</b>	<b>25</b>
19.1	Class Propagation . . . . .	25
19.1.1	Class Variables . . . . .	25
<b>20</b>	<b>Module GroundSegment.models.PropagationDetail</b>	<b>26</b>
20.1	Class PropagationDetail . . . . .	26

20.1.1	Methods . . . . .	26
20.1.2	Class Variables . . . . .	26
<b>21</b>	<b>Module GroundSegment.models.SatelliteState</b>	<b>27</b>
21.1	Class SatelliteState . . . . .	27
21.1.1	Methods . . . . .	27
21.1.2	Class Variables . . . . .	27
<b>22</b>	<b>Module GroundSegment.models.Site</b>	<b>28</b>
22.1	Class Site . . . . .	28
22.1.1	Methods . . . . .	28
22.1.2	Class Variables . . . . .	28
<b>23</b>	<b>Module GroundSegment.models.Sitio</b>	<b>29</b>
23.1	Class Sitio . . . . .	29
23.1.1	Methods . . . . .	29
23.1.2	Class Variables . . . . .	29
<b>24</b>	<b>Module GroundSegment.models.Tle</b>	<b>30</b>
24.1	Class Tle . . . . .	30
24.1.1	Methods . . . . .	30
24.1.2	Class Variables . . . . .	30
<b>25</b>	<b>Module GroundSegment.models.TlmyVarType</b>	<b>32</b>
25.1	Class TlmyVarType . . . . .	32
25.1.1	Class Variables . . . . .	32
<b>26</b>	<b>Module GroundSegment.models.Transforms</b>	<b>33</b>
26.1	Class SqlLiteDatetimeDate . . . . .	33
26.1.1	Methods . . . . .	33
26.1.2	Class Variables . . . . .	33
<b>Index</b>		<b>34</b>

# 1 Package GroundSegment.models

## 1.1 Modules

- **Alarm** (*Section 2, p. 6*)
  - **Action**: Created on Sep 27, 2016  
(*Section 3, p. 7*)
  - **Alarm**: Created on 4 de set.  
(*Section 4, p. 8*)
  - **AlarmState**: Created on 4 de set.  
(*Section 5, p. 10*)
  - **AlarmType**: Created on 4 de set.  
(*Section 6, p. 11*)
  - **Criticity**: Created on 4 de set.  
(*Section 7, p. 12*)
- **CommandType**: Created on 25 de ago.  
(*Section 8, p. 13*)
- **CommandTypeParameter**: Created on 25 de ago.  
(*Section 9, p. 14*)
- **Consts**: Created on Sep 27, 2016  
(*Section 10, p. 15*)
- **Notification** (*Section 11, p. 16*)
  - **AlarmTypeNotificationType**: Created on Sep 27, 2016  
(*Section 12, p. 17*)
  - **Contact**: Created on Sep 27, 2016  
(*Section 13, p. 18*)
  - **MessageTemplate**: Created on Sep 27, 2016  
(*Section 14, p. 19*)
  - **Notification**: Created on Sep 27, 2016  
(*Section 15, p. 20*)
  - **NotificationType**: Created on Sep 27, 2016  
(*Section 16, p. 22*)
- **Parameter** (*Section 17, p. 23*)
- **Pasada**: Created on Sep 2, 2016  
(*Section 18, p. 24*)
- **Propagation**: Created on Aug 29, 2016  
(*Section 19, p. 25*)
- **PropagationDetail**: Created on Aug 29, 2016  
(*Section 20, p. 26*)
- **Satellite** (*Section ??, p. ??*)
- **SatelliteState**: Created on 25 de ago.  
(*Section 21, p. 27*)
- **Site**: Created on Sep 16, 2016  
(*Section 22, p. 28*)
- **Sitio**: Created on Sep 5, 2016  
(*Section 23, p. 29*)
- **Tle**: Created on Aug 24, 2016  
(*Section 24, p. 30*)
- **TlmyVarType**: Created on 3 de set.  
(*Section 25, p. 32*)
- **Transforms**: Created on Aug 29, 2016

*(Section 26, p. 33)*

## 2 Package GroundSegment.models.Alarm

### 2.1 Modules

- **Action:** Created on Sep 27, 2016  
(Section 3, p. 7)
- **Alarm:** Created on 4 de set.  
(Section 4, p. 8)
- **AlarmState:** Created on 4 de set.  
(Section 5, p. 10)
- **AlarmType:** Created on 4 de set.  
(Section 6, p. 11)
- **Criticality:** Created on 4 de set.  
(Section 7, p. 12)

## 3 Module **GroundSegment.models.Alarm.Action**

Created on Sep 27, 2016

**Author:** ubuntuimate

### 3.1 Class **Action**

django.db.models.Model  **GroundSegment.models.Alarm.Action.Action**

## 4 Module GroundSegment.models.Alarm.Alarm

Created on 4 de set. de 2016

**Author:** Pablo Soligo

### 4.1 Variables

Name	Description
PENDING	<b>Value:</b> 0
OPEN	<b>Value:</b> 1
CLOSED	<b>Value:</b> 2
ALARM_STATUS	<b>Value:</b> PENDING, 'Pendiente', (OPEN, 'Abierta'), (CLOSED, 'Cerrad...

### 4.2 Class Alarm

django.db.models.Model —  
GroundSegment.models.Alarm.Alarm.Alarm

Clase/Entidad encargada de almacenar las alarmas producidas por situaciones fuera de las esperadas. Las alarmas pueden producirse por valores de telemetria por fuera de los rangos aceptados o situaciones no nominales

#### 4.2.1 Methods

```
__init__(self, *args, **kwargs)
```

```
new(cls, satellite, alarmtype, dtArrival)
```

```
setOpen(self)
```

Este metodo verifica si es posible el cambio de estado de la alarma a abierta y en caso de ser posible lo realiza. Genera una excepcion en caso de no poder cumplirse la operacion

```
setClose(self)
```

Este metodo verifica si es posible el cambio de estado de la alarma a cerrada y en caso de ser posible lo realiza. Genera una excepcion en caso de no poder cumplirse la operacion

```
isOvercome(self)
```

Indica si la alarma no fue atendida en el tiempo dispuesto para ello

#### 4.2.2 Class Variables



Name	Description
alarmType	<b>Value:</b> models.ForeignKey(AlarmType, related_name= "alarms")
state	<b>Value:</b> models.IntegerField()
dtArrival	<b>Value:</b> models.DateTimeField(default= 0)
satellite	<b>Value:</b> models.ForeignKey(Satellite, related_name= 'alarms')

## 5 Module GroundSegment.models.Alarm.AlarmState

Created on 4 de set. de 2016

**Author:** Pablo Soligo

### 5.1 Class AlarmState



#### 5.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 5.1.2 Class Variables

Name	Description
code	<b>Value:</b> models.CharField('Codigo del estado de la alarma', max_le...
description	<b>Value:</b> models.CharField('Decripcion del estado de la alarma', ma...

## 6 Module GroundSegment.models.Alarm.AlarmType

Created on 4 de set. de 2016

**Author:** pabli

### 6.1 Class AlarmType

django.db.models.Model — GroundSegment.models.Alarm.AlarmType.AlarmType

#### 6.1.1 Methods

<code>__str__(self)</code>
----------------------------

<code>getAlarms(self)</code>
------------------------------

#### 6.1.2 Class Variables

Name	Description
code	<b>Value:</b> models.CharField('Codigo del tipo de alarma', max_length=...
description	<b>Value:</b> models.CharField('Decripcion del tipo de alarma', max_len...
criticity	<b>Value:</b> models.ForeignKey(Criticity, related_name= 'alarmstype')
procedure	<b>Value:</b> models.TextField(help_text= 'Procedimiento a ejecutar por...
timeout	<b>Value:</b> models.IntegerField(help_text= 'tiempo maximo para tratar...

## 7 Module GroundSegment.models.Alarm.Criticality

Created on 4 de set. de 2016

**Author:** Pablo Soligo

### 7.1 Class Criticality

django.db.models.Model —  
GroundSegment.models.Alarm.Criticality.Criticality

#### 7.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 7.1.2 Class Variables

Name	Description
code	<b>Value:</b> models.CharField('Codigo de criticidad', max_length= 24, ...
description	<b>Value:</b> models.CharField('Decripcion de la criticidad', max_lengt...
color	<b>Value:</b> models.CharField(max_length= 7, default="#FF0000")
sound	<b>Value:</b> models.FileField("/media")

## 8 Module *GroundSegment.models.CommandType*

Created on 25 de ago. de 2016

**Author:** pabli

### 8.1 Class *CommandType*

django.db.models.Model — *GroundSegment.models.CommandType.CommandType*

#### 8.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 8.1.2 Class Variables

Name	Description
code	<b>Value:</b> <code>models.CharField('Codigo del tipo de comando', max_length...</code>
description	<b>Value:</b> <code>models.CharField('Decripcion del tipo de comando', max_le...</code>
satellite	<b>Value:</b> <code>models.ForeignKey(Satellite, related_name= 'commandsType')</code>
satelliteStates	<b>Value:</b> <code>models.ManyToManyField(SatelliteState, related_name= 'com...</code>
active	<b>Value:</b> <code>models.BooleanField(default= True)</code>
transactional	<b>Value:</b> <code>models.BooleanField(default= False)</code>
timeout	<b>Value:</b> <code>models.IntegerField('Tiempo en segundos?', default= 0, nu...</code>
notes	<b>Value:</b> <code>models.TextField('Consecuencias, restricciones del comand...</code>

## 9 Module **GroundSegment.models.CommandTypeParameter**

Created on 25 de ago. de 2016

**Author:** pablosoligo

### 9.1 Class **CommandTypeParameter**

django.db.models.Model — **GroundSegment.models.CommandTypeParameter.CommandTypeParameter**

## 10 Module GroundSegment.models.Consts

Created on Sep 27, 2016

**Author:** ubuntumate

### 10.1 Class Consts

```

object └─
          GroundSegment.models.Consts.Consts
classdocs

```

#### 10.1.1 Methods

<code>__init__(self, params)</code>
Constructor
Overrides: object.__init__

#### *Inherited from object*

```

__delattr__(), __format__(), __getattr__(), __hash__(), __new__(),
__reduce__(), __reduce_ex__(), __repr__(), __setattr__(), __sizeof__(),
__str__(), __subclasshook__()

```

#### 10.1.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

#### 10.1.3 Class Variables

Name	Description
smallString	<b>Value:</b> 64
mediumString	<b>Value:</b> 128
bigString	<b>Value:</b> 512

## 11 Package GroundSegment.models.Notification

### 11.1 Modules

- **AlarmTypeNotificationType**: Created on Sep 27, 2016  
(Section 12, p. 17)
- **Contact**: Created on Sep 27, 2016  
(Section 13, p. 18)
- **MessageTemplate**: Created on Sep 27, 2016  
(Section 14, p. 19)
- **Notification**: Created on Sep 27, 2016  
(Section 15, p. 20)
- **NotificationType**: Created on Sep 27, 2016  
(Section 16, p. 22)



## 12 Module GroundSegment.models.Notification.AlarmTypeNotificationType

Created on Sep 27, 2016

**Author:** ubuntumate

### 12.1 Class AlarmTypeNotificationType

django.db.models.Model —  
GroundSegment.models.Notification.AlarmTypeNotificationType.A

#### 12.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 12.1.2 Class Variables

Name	Description
notificationType	<b>Value:</b> models.ForeignKey(NotificationType, on_delete= models.PRO...
alarmType	<b>Value:</b> models.ForeignKey(AlarmType, on_delete= models.PROTECT, r...
messageTemplate	<b>Value:</b> models.ForeignKey(MessageTemplate, on_delete= models.PROT...
contacts	<b>Value:</b> models.ManyToManyField(Contact, related_name= "alarmTypeN...

## 13 Module GroundSegment.models.Notification.Contact

Created on Sep 27, 2016

**Author:** ubuntumate

### 13.1 Class Contact

django.db.models.Model —  
**GroundSegment.models.Notification.Contact.Contact**

Contacto/destinatario del las notificaciones. No necesariamente tiene que ser usuario del software del ground segment y por tanto se plantea como una entidad separada.

**See Also:** Los atributos de esta entidad estan relacionados con los tipos de notificaciones disponibles

**Change Log:** Los atributos de esta entidad estan relacionados con los tipos de notificaciones disponibles, al agregar mas tipos de notificaciones puede ser necesario enriquecer esta entidad

#### 13.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 13.1.2 Class Variables

Name	Description
name	<b>Value:</b> models.CharField('Nombre del contacto', max_length= Const...
email	<b>Value:</b> models.EmailField('EMail del contacto', max_length= Const...

## 14 Module `GroundSegment.models.Notification.MessageTemplate`

Created on Sep 27, 2016

**Author:** ubuntumate

### 14.1 Class `MessageTemplate`

django.db.models.Model  `GroundSegment.models.Notification.MessageTemplate.MessageTemplate`

#### 14.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 14.1.2 Class Variables

Name	Description
name	<b>Value:</b> <code>models.CharField('Nombre de la plantilla', max_length= Co...</code>
subject	<b>Value:</b> <code>models.CharField('Asunto del mensaje', max_length= Consts...</code>
text	<b>Value:</b> <code>models.TextField(null= False, default= "Sin mensaje")</code>

## 15 Module GroundSegment.models.Notification.Notification

Created on Sep 27, 2016

**Author:** ubuntumate

### 15.1 Class Notification

django.db.models.Model —  
GroundSegment.models.Notification.Notification.Notification

Notifacion efectiva enviada o por enviar. Generada a partir de la configuracion del sist

Objetivo

=====

Repositorio para las notificaciones generadas y enviadas.

Implementacion

=====

Se utiliza una unica entidad, las notificaciones se marcan como envidas cuando puede  
indican la cantidad de intentos y se marcan como fallidas

#### 15.1.1 Methods

```
new(cls, **kwargs)
```

```
__str__(self)
```

#### 15.1.2 Class Variables

Name	Description
subject	<b>Value:</b> models.CharField('Asunto de la notificacion', max_length=...
text	Texto de la notificacion <b>Value:</b> models.TextField(null= False, default= "Sin mensaje")
contacts	<b>Value:</b> models.ManyToManyField(Contact, related_name= "notificati...

*continued on next page*

Name	Description
alarmTypeNotificationType	<b>Value:</b> <code>models.ForeignKey(AlarmTypeNotificationType, related_name=...)</code>
sended	<b>Value:</b> <code>models.BooleanField(default=False)</code>
ntry	<b>Value:</b> <code>models.IntegerField(default= 0)</code>

## 16 Module GroundSegment.models.Notification.NotificationType

Created on Sep 27, 2016

**Author:** ubuntumate

### 16.1 Class NotificationType

django.db.models.Model

GroundSegment.models.Notification.NotificationType.NotificationT

Tipo de notificacion, esta entidad tiene logica asociada e indica el canal de notificacion, normalmente email, sms, filereport. Para el FS2017 en su fase academica solo implementa email

**See Also:** En fase academica FS2017 solo se plantea como tipo de notificacion el correo electronico

**Change Log:** En fase academica FS2017 solo se plantea como tipo de notificacion el correo electronico

#### 16.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 16.1.2 Class Variables

Name	Description
description	<b>Value:</b> models.CharField('Decripcion del tipo de Notificacion', m...

#### 16.1.3 Instance Variables

Name	Description
code	This is an instance variable. <b>Value:</b> models.CharField('Codigo del tipo de notificacion', max_l...

## 17 Module GroundSegment.models.Parameter

### 17.1 Class Parameter

django.db.models.Model —  
GroundSegment.models.Parameter.Parameter

#### 17.1.1 Methods

**create**(*cls, module, key, value, description*)

**\_\_str\_\_**(*self*)

**getKey**(*self*)

**getValue**(*self*)

#### 17.1.2 Class Variables

Name	Description
module	<b>Value:</b> models.CharField('Modulo', max_length= 64, help_text= 'Mo...
key	<b>Value:</b> models.CharField('Clave', max_length= 24, help_text= 'Cla...
value	<b>Value:</b> models.CharField('Valor', max_length= 128, help_text= 'Va...
description	<b>Value:</b> models.TextField('Descripcion', help_text= 'Descripcion d...

## 18 Module GroundSegment.models.Pasada

Created on Sep 2, 2016

**Author:** ubuntumate

### 18.1 Class Pasada

django.db.models.Model —  
GroundSegment.models.Pasada.Pasada

#### 18.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 18.1.2 Class Variables

Name	Description
name	<b>Value:</b> models.CharField(max_length= 128, unique= True)
satellite	<b>Value:</b> models.ForeignKey(Satellite, related_name= 'pasadas')
sitio	<b>Value:</b> models.ForeignKey(Sitio, related_name= 'pasadas')
startTime	<b>Value:</b> models.DateTimeField(auto_now_add= True)
stopTime	<b>Value:</b> models.DateTimeField(auto_now_add= True)



## 19 Module GroundSegment.models.Propagation

Created on Aug 29, 2016

**Author:** ubuntuimate

### 19.1 Class Propagation

django.db.models.Model — GroundSegment.models.Propagation.Propagation

#### 19.1.1 Class Variables

Name	Description
created	<b>Value:</b> models.DateTimeField(auto_now_add=True)
tle	<b>Value:</b> models.ForeignKey(Tle, related_name= 'propagations')
satellite	<b>Value:</b> models.ForeignKey(Satellite, related_name= 'propagations')
final	<b>Value:</b> models.BooleanField(default=False)

## 20 Module *GroundSegment.models.PropagationDetail*

Created on Aug 29, 2016

**Author:** ubuntumate

### 20.1 Class *PropagationDetail*

django.db.models.Model — *GroundSegment.models.PropagationDetail.PropagationDetail*

#### 20.1.1 Methods

<code>save(<i>self</i>, *<i>args</i>, **<i>kwargs</i>)</code>
---

#### 20.1.2 Class Variables

Name	Description
created	<b>Value:</b> <code>models.DateTimeField(auto_now_add=True)</code>
dt	<b>Value:</b> <code>models.DateTimeField()</code>
propagation	<b>Value:</b> <code>models.ForeignKey(Propagation, related_name= 'propagation...)</code>
positionX	<b>Value:</b> <code>models.FloatField()</code>
positionY	<b>Value:</b> <code>models.FloatField()</code>
positionZ	<b>Value:</b> <code>models.FloatField()</code>
velocityX	<b>Value:</b> <code>models.FloatField()</code>
velocityY	<b>Value:</b> <code>models.FloatField()</code>
velocityZ	<b>Value:</b> <code>models.FloatField()</code>
earthDistance	<b>Value:</b> <code>models.FloatField(default= 0.0)</code>

## 21 Module `GroundSegment.models.SatelliteState`

Created on 25 de ago. de 2016

**Author:** pabli

### 21.1 Class `SatelliteState`

`django.db.models.Model` — `GroundSegment.models.SatelliteState.SatelliteState`

#### 21.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 21.1.2 Class Variables

Name	Description
code	<b>Value:</b> <code>models.CharField('Codigo de estado', max_length= 24, help...</code>
description	<b>Value:</b> <code>models.CharField('Codigo de estado', max_length= 100, hel...</code>

## 22 Module GroundSegment.models.Site

Created on Sep 16, 2016

**Author:** ubuntumate

### 22.1 Class Site



#### 22.1.1 Methods

<code>setLatitude(<i>self</i>, <i>value</i>)</code>
---

<code>setLongitude(<i>self</i>, <i>value</i>)</code>
--

<code>setAltitude(<i>self</i>, <i>value</i>)</code>
---

<code>getPass(<i>self</i>, <i>fro</i>, <i>to</i>, <i>satellite</i>)</code>
--

#### 22.1.2 Class Variables

Name	Description
name	<b>Value:</b> models.CharField("Nombre del Sitio", max_length= 100, uni...
latitude	<b>Value:</b> models.FloatField('latitude', help_text= '[Grados Decimal...
longitude	<b>Value:</b> models.FloatField('Longitud', help_text= '[Grados Decimal...
altitude	<b>Value:</b> models.FloatField('altura', help_text= '[metros]')

## 23 Module GroundSegment.models.Sitio

Created on Sep 5, 2016

**Author:** ubuntumate

### 23.1 Class Sitio

django.db.models.Model —  
GroundSegment.models.Sitio.Sitio

#### 23.1.1 Methods

<code>__str__(self)</code>
----------------------------

#### 23.1.2 Class Variables

Name	Description
name	<b>Value:</b> models.CharField("Nombre del Sitio", max_length= 24, uniq...
lat	<b>Value:</b> models.FloatField('Latitud', help_text= '[Dato en Grados ...
lon	<b>Value:</b> models.FloatField('Longitud', help_text= '[Grados Decimal...
h	<b>Value:</b> models.FloatField('altura', help_text= '[metros]', unique...

## 24 Module `GroundSegment.models.Tle`

Created on Aug 24, 2016

**Author:** Pablo Soligo

### 24.1 Class `Tle`



Clase/Entidad TLE. Almacena la informacion de los TLE incluyendo su fecha de descarga y la epoca de TLE

#### 24.1.1 Methods

<b><code>getLine1(self)</code></b>
Retorna la primera linea del TLE en formato texto plano
<b>Return Value</b>
primera linea del TLE en texto plano. ( <i>type=string</i> )

<b><code>getLine2(self)</code></b>
Retorna la segunda linea del TLE en formato texto plano
<b>Return Value</b>
segunda linea del TLE en texto plano. ( <i>type=string</i> )

#### 24.1.2 Class Variables

Name	Description
<code>tleDateTime</code>	Fecha generacion del TLE, si no fuera seteada se utilizara la fecha hora actual <b>Value:</b> <code>models.DateTimeField(auto_now_add=True)</code>

*continued on next page*

Name	Description
downloaded	Fecha de descarga del TLE <b>Value:</b> <code>models.DateTimeField(auto_now_add=True)</code>
lines	Lineas del TLE <b>Value:</b> <code>models.TextField(max_length=124,)</code>
satellite	Satelite asociado al TLE <b>Value:</b> <code>models.ForeignKey(Satellite, related_name= 'tles')</code>

## 25 Module *GroundSegment.models.TmlyVarType*

Created on 3 de set. de 2016

**Author:** Pablo Soligo

### 25.1 Class *TmlyVarType*

django.db.models.Model  **GroundSegment.models.TmlyVarType.TmlyVarType**

#### 25.1.1 Class Variables

Name	Description
code	<b>Value:</b> models.CharField('Codigo del tipo de variable', max_lengt...
description	<b>Value:</b> models.CharField('Decripcion del tipo de variable', max_l...



## 26 Module *GroundSegment.models.Transforms*

Created on Aug 29, 2016

**Author:** ubuntuamate

### 26.1 Class *SQLiteDatetimeDate*

`django.db.models.Transform` — `GroundSegment.models.Transforms.SQLiteDatetimeDate`

classdocs

#### 26.1.1 Methods

<code>as_sql(<i>self</i>, <i>compiler</i>, <i>connection</i>)</code>
--

<code>output_field(<i>self</i>)</code>
--

#### 26.1.2 Class Variables

Name	Description
lookup_name	<b>Value:</b> 'date'

## Index

GroundSegment (*package*)  
   GroundSegment.models (*package*), 4–5  
     GroundSegment.models.Alarm (*package*), 6  
       GroundSegment.models.Alarm.Alarm.Alarm.setOpen (*method*), 8  
       GroundSegment.models.Alarm.AlarmState.AlarmState (*class*), 10  
       GroundSegment.models.Alarm.AlarmState.AlarmState.AlarmState (*method*), 10  
       GroundSegment.models.Alarm.AlarmType.AlarmType (*class*), 11  
       GroundSegment.models.Alarm.AlarmType.AlarmType.AlarmType (*method*), 11  
       GroundSegment.models.Alarm.Criticality.Criticality (*class*), 12  
       GroundSegment.models.Alarm.Criticality.Criticality.\_\_str\_\_ (*method*), 12  
       GroundSegment.models.CommandType.CommandType (*class*), 13  
       GroundSegment.models.CommandType.CommandType.CommandType (*method*), 13  
       GroundSegment.models.CommandTypeParameter.CommandTypeParameter (*class*), 14  
       GroundSegment.models.Consts (*module*), 15  
       GroundSegment.models.Notification (*package*), 16  
       GroundSegment.models.Parameter (*module*), 23  
       GroundSegment.models.Pasada (*module*), 24  
       GroundSegment.models.Propagation (*module*), 25  
       GroundSegment.models.PropagationDetail (*module*), 26  
       GroundSegment.models.SatelliteState (*module*), 27  
       GroundSegment.models.Site (*module*), 28  
       GroundSegment.models.Sitio (*module*), 29  
       GroundSegment.models.Tle (*module*), 30–31  
       GroundSegment.models.TlmyVarType (*module*), 32  
       GroundSegment.models.Transforms (*module*), 33  
   GroundSegment.models.Alarm.Action.Action (*class*), 7  
   GroundSegment.models.Alarm.Alarm.Alarm (*class*), 8–9  
     GroundSegment.models.Alarm.Alarm.Alarm.\_\_init\_\_ (*method*), 8  
     GroundSegment.models.Alarm.Alarm.Alarm.isGroundSegment (*method*), 8  
     GroundSegment.models.Alarm.Alarm.Alarm.newGroundSegment (*class method*), 8  
     GroundSegment.models.Alarm.Alarm.Alarm.setGroundSegment (*method*), 8  
     GroundSegment.models.Alarm.Alarm.Alarm.setOpen (*method*), 8  
     GroundSegment.models.Alarm.AlarmState.AlarmState (*class*), 10  
     GroundSegment.models.Alarm.AlarmState.AlarmState.AlarmState (*method*), 10  
     GroundSegment.models.Alarm.AlarmType.AlarmType (*class*), 11  
     GroundSegment.models.Alarm.AlarmType.AlarmType.AlarmType (*method*), 11  
     GroundSegment.models.Alarm.Criticality.Criticality (*class*), 12  
     GroundSegment.models.Alarm.Criticality.Criticality.\_\_str\_\_ (*method*), 12  
     GroundSegment.models.CommandType.CommandType (*class*), 13  
     GroundSegment.models.CommandType.CommandType.CommandType (*method*), 13  
     GroundSegment.models.CommandTypeParameter.CommandTypeParameter (*class*), 14  
     GroundSegment.models.Notification.AlarmTypeNotification (*class*), 17  
     GroundSegment.models.Notification.AlarmTypeNotification.AlarmTypeNotification (*method*), 17  
     GroundSegment.models.Notification.Contact.Contact (*class*), 18  
     GroundSegment.models.Notification.Contact.Contact.\_\_str\_\_ (*method*), 18  
     GroundSegment.models.Notification.Notification.Notification (*class*), 20–21  
     GroundSegment.models.Notification.Notification.Notification (*method*), 20  
     GroundSegment.models.Notification.Notification.NotificationNotification (*class method*), 20  
     GroundSegment.models.Notification.NotificationType.NotificationType (*class*), 22  
     GroundSegment.models.Notification.NotificationType.NotificationTypeNotification (*method*), 22  
     GroundSegment.models.Parameter.Parameter (*class*), 23

(*class*), 23  
GroundSegment.models.Parameter.Parameter.\_\_str\_\_  
(*method*), 23  
GroundSegment.models.Parameter.Parameter.create  
(*class method*), 23  
GroundSegment.models.Parameter.Parameter.getKey  
(*method*), 23  
GroundSegment.models.Parameter.Parameter.getValue  
(*method*), 23  
GroundSegment.models.Pasada.Pasada (*class*),  
24  
GroundSegment.models.Pasada.Pasada.\_\_str\_\_  
(*method*), 24  
GroundSegment.models.Propagation.Propagation  
(*class*), 25  
GroundSegment.models.PropagationDetail.PropagationDetail  
(*class*), 26  
GroundSegment.models.PropagationDetail.PropagationDetail.save  
(*method*), 26  
GroundSegment.models.SatelliteState.SatelliteState  
(*class*), 27  
GroundSegment.models.SatelliteState.SatelliteState.\_\_str\_\_  
(*method*), 27  
GroundSegment.models.Site.Site (*class*), 28  
GroundSegment.models.Site.Site.getPass (*method*),  
28  
GroundSegment.models.Site.Site.setAltitude  
(*method*), 28  
GroundSegment.models.Site.Site.setLatitude  
(*method*), 28  
GroundSegment.models.Site.Site.setLongitude  
(*method*), 28  
GroundSegment.models.Tle.Tle (*class*), 30–  
31  
GroundSegment.models.Tle.Tle.getLine1 (*method*),  
30  
GroundSegment.models.Tle.Tle.getLine2 (*method*),  
30