

## **Semios DPF Reference**

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# Semios DPF Reference

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This section describes the Data Processing Functions implemented to allow Semios to use PHEMI Central.

For information about supported data types, see [Data Types in Queries](#)

## DPF Metadata

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This section describes the metadata generated when a Semios log entry is processed.

Name	Type	Description
datasource	admin	The identifier of the data source.
document_status	admin	The status of the document. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
source_of_data	admin	TBD
data:chunks	data	TBD
encoding	data	The encoding algorithm used to encode the document. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
encryption_key	data	The encryption key used to encrypt the document. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
encryption_type	data	The type of encryption used to encrypt the document. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
hash	data	The hash algorithm used to secure the document. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>

Name	Type	Description
size	data	The size of the document. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
type	data	The document type. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
asset_type	descriptive	The assigned type of the digital asset. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
asset_type	descriptive	The assigned type of the digital asset. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
name	descriptive	A mnemonic name for the document. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
metadata_checksum	header	A checksum for verifying the integrity of the message. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
process_information	header	???. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>
system_identifier	header	???. Supported values are as follows: <ul style="list-style-type: none"> <li>• X</li> <li>• Y</li> <li>• Z</li> </ul>

Name	Type	Description
version	header	The version of software running on the system. Supported values are as follows:

## DPF Processed Tags

This section describes the derived data that the Semios DPF extracts from log messages.

Name	Type	Description
id	STRING	The unique identifier of the log message.
log_timestamp	STRING	The timestamp of the message.  Log timestamps are received and persisted "as is"; that is, as type STRING. All dates and timestamps must be sent in ISO 8601 format (for example, 2014-06-23T19:35:00-07:00). The PHEMI system also uses this format for aggregations. For aggregations, all dates and times must be local, in order to align with the local time clock, so, for example, a day extends from midnight to midnight local time.

## DPF Processed Data

This section describes the data that is processed for Semios log messages.

Name	Type	Description
latitude	DOUBLE	?. Format is XXXX:
longitude	DOUBLE	?. Format is XXXX:
mac	STRING	The Media Access Control (MAC) address of the sending system. Format is a six-octet number expressed in hexadecimal.
timezone	STRING	The timezone of the sending system.

Name	Type	Description
ALGAD	LONG	TBD
ack	LONG	TBD
app_version	STRING	TBD
awake	LONG	TBD

Name	Type	Description
battery	LONG	TBD
bridge_reboot	LONG	TBD
conf	LONG	TBD
dev_installed	LONG	TBD
device_model	STRING	TBD
dew_point	DOUBLE	TBD
env_ambient_temperature_celsius	DOUBLE	TBD
env_ambient_temperature_fahrenheit	DOUBLE	TBD
env_humidity_percent	DOUBLE	TBD
error_code	LONG	TBD
errors	LONG	TBD
event_error	LONG	TBD
firmware_version	STRING	TBD
humidity	LONG	TBD
image_count	LONG	TBD
ir_off	LONG	TBD
ir_on	LONG	TBD
last_error	LONG	TBD
lithium	LONG	TBD
model	LONG	TBD
modem_reboot	LONG	TBD
moisture_0_15	LONG	TBD
moisture_105_120	LONG	TBD
moisture_15_30	LONG	TBD
moisture_30_45	LONG	TBD
moisture_45_60	LONG	TBD
moisture_60_75	LONG	TBD
moisture_75_90	LONG	TBD
moisture_90_105	LONG	TBD
node_missed	LONG	TBD
node_type	LONG	TBD
node_unknown	LONG	TBD
os_reboot	LONG	TBD
os_version	STRING	TBD

Name	Type	Description
rain	LONG	TBD
raw_ambient_temperature	LONG	TBD
raw_board_temperature	LONG	TBD
raw_humidity	LONG	TBD
rte_depth	LONG	TBD
signal	LONG	TBD
solar	LONG	TBD
solar_radiation	LONG	TBD
spray_count	LONG	TBD
spray_on	LONG	TBD
temperature	LONG	TBD
temperature_15	LONG	TBD
temperature_45	LONG	TBD
temperature_75	LONG	TBD
temperature_90	LONG	TBD
thinkness	LONG	TBD
ttl_left	LONG	TBD
upload_time	LONG	TBD
uptime	LONG	TBD
uv_radiation	LONG	TBD
vm_error	LONG	TBD
wetness	LONG	TBD
wet_bulb	DOUBLE	TBD
wind_direction	LONG	TBD
wind_speed	LONG	TBD