

# Combined View report

## Access

The Combined View report is a report accessed via the “Reports” menu then “All Reports...” then under the “Usage - Breakdown” heading.

## Summary

This report shows the reportable value for the asset / activity / month, and then tracks back to show each pedigreed Accepted raw data record (and any linked network records) that combined in part or in whole to give us the reportable value for a month. **It is intended for expert users.**

## Execution

An exchange or activity is selected, along with a month range.

Sample Exchange/Activity List options might include:

- AirTravel (includes network data)
- ElectricityBilling (includes network data)
- FuelBilling (includes network data)
- GasBilling (includes network data)
- Paper (includes network data)
- WaterBilling (includes network data)
- Diesel Oil in Buildings (no network data)
- Diesel Oil in Buildings Indirect Emissions (no network data)
- Electricity T&D (no network data)
- Liquefied Petroleum Gas (no network data)
- Natural Gas Indirect Emissions (no network data)

The exchanges available for selection are determined by the measurement devices in the user's tenancy. For example, if a measurement device in the system has checked GAS\_BILLING as one of its Eden Exchanges, then “GasBilling (includes network data)” will appear in the list. Selecting “GasBilling (includes network data)” will pull data for any activities conducted by devices linked to the exchange.

Selecting an activity with no network data e.g. “Gasoline in Buildings (no network data)”, will pull data for that selected activity only (regardless of measurement devices and their settings).

The produced report will include the monthly reported values for each asset and any records that are used in part or whole to contribute to the monthly reported value. If “includes network data” is selected, any linked network records will also be displayed. If “no network data” is selected, no network data will be included (even if it exists).

- ① Usage data goes through a number of steps before being finalised for reporting. Data may enter the system via the network where it is then transferred into Eden Suite. Each successfully transferred network record results in a single Raw Activity Data (RAD or Raw Data) record for the relevant measurement device.
- ① If the raw data has a status of Accepted, it is used to create a Periodic Raw Activity Data (PRAD or Pedigreed Data) record. Raw Data records are for a date range that may span part of one month or many months. Pedigreed Data is for a single month, so Raw Data records are prorated for every data in the date range. In addition, Raw Data records are for

a single measurement device whereas Pedigreed Data records are for an asset. As a result, Raw Data across all devices for an asset are combined into the Pedigreed Data.

- ① Periodic Raw Activity Data is combined into Periodic Activity Data (PAD or Accepted Data) for the same asset and month based on the priority of the Pedigreed Data, or a manual override. Therefore, the Accepted Data no longer has a pedigree. It is at the Accepted Data stage that aggregation and apportioning also occur.
- ① The PRAD / Pedigreed Data details in this report are for those records that have contributed some or all of their value to the finalised reportable data, based on pedigree and date ranges.
- ① This report only includes PAD / Accepted Data records that were directly received e.g. no aggregated or apportioned PAD records are included as they do not have linked PRAD records, and pedigree information is captured and required in this report.

The following report fields are common to every Combined View report. (If network data is to be included, additional columns relevant to the nominated exchange will be appended.)

Report Field	Description
Tenant Name	Name of the tenant containing the usage data
Activity Name	Name of the periodic activity data (PAD) activity
Activity Unit Code	Code of unit configured for the activity. This unit applies to RADs, PRADs, and PADs. It may not necessarily be the same unit captured in the network data.
Asset Name	Name of the periodic activity data (PAD) asset
Measurement Device Name	Name of the measurement device that captured the Raw Activity Data.  This may not be the primary device identifier e.g. NMI, MIRN. It depends on the naming convention adopted. The device name is captured at the raw data level. It is possible that raw data from a number of different measurement devices is combined to create one Accepted record (for the same Code, same device type and same lined asset).
ID (Raw Activity Data)	Unique identifier of the raw activity data (RAD) record.  Included for completeness, this field can useful in determining how many RAD records contribute to the PRAD record.
Month From Date	First day of the month of the periodic activity data (RAD)
Code	The field code of the Periodic Activity Data (RAD) e.g. Quantity, Qty-Electricity, Qty-Green Power.
Source System (Raw Data)	"EDEN" if the raw activity data originated from a network record, blank otherwise.
Source System Identifier (Raw	Blank if the raw activity data did not originate from the

Data)	<p>network; identifier of the exchange otherwise.</p> <p>Values include:</p> <ul style="list-style-type: none"> <li>• AIR_TRAVEL</li> <li>• ELECTRICITY_BILLING</li> <li>• FUEL_BILLING</li> <li>• GAS_BILLING</li> <li>• PAPER</li> </ul> <p>WATER_BILLING</p>
Transport Identifier (Raw Data)	Included for completeness, this field contains the identifier of the network message when the network record was transferred.
From Date (Raw Data)	Start date of the range for the raw data
To Date (Raw Data)	End date of the range for the raw data
Status (Raw Data)	<p>Available statuses of a raw activity data record are:</p> <ul style="list-style-type: none"> <li>• Pending – data cannot contribute to finalised reportable values</li> <li>• Rejected – data cannot contribute to finalised reportable values</li> <li>• Accepted – data CAN contribute to finalised reportable values</li> </ul> <p>Only ACCEPTED raw data records appear in this report as only they contribute to finalised reportable values.</p>
Network Item Id (Raw Data)	An identifier that provides a link to the network item in the exchange that resulted in the creation of the raw activity data. If the raw data did not originate from the network then this field is blank.
Description (Raw Data)	This field may be blank. For data originating in the network, this field is a combination of supplier and device identifier information. This field can be searched in 3.0 Find Data.
Value (Raw Data)	The field value of the Raw Activity Data (RAD). This value may not equal that of the matching Pedigreed value because part, whole or none of a raw data value may be used to create a linked Pedigreed record. In addition, raw values usually need to be prorated before being used in creating a Pedigreed record.
Used Value (Raw Data)	<p>How much of the Raw Data/RAD value is used by the Accepted Data/PAD.</p> <p>As PRAD values may exist for multiple pedigrees for the same asset/activity/month, for varying underlying date ranges, it is possible that while some PRAD records are not used at all, some are used completely, whereas others are only used in part (e.g. to fill a gap where there is no higher pedigreed data).</p>

Pedigree Data Source	<p>The Data Source and Usage Type together define the pedigree of the data.</p> <p>Data Source values may include:</p> <ul style="list-style-type: none"> <li>• EDMS Generated</li> <li>• Supplier Invoice</li> <li>• Supplier Electronic</li> <li>• Sub Metered – Electronic</li> <li>• Manual Reading</li> <li>• Entity Records</li> <li>• User Generated</li> </ul> <p>Waste Audit</p>
Pedigree Usage Type	<p>The Data Source and Usage Type together define the pedigree of the data.</p> <p>Usage Type values are:</p> <ul style="list-style-type: none"> <li>• Actual</li> </ul> <p>Estimated</p>
Pedigree Priority	<p>Priority is the importance assigned to the pedigree.</p> <p>Priorities may be assigned in different orders for each activity.</p> <p>The smaller the number the more important the pedigree. A pedigree of 0 is considered the highest pedigree of data.</p>
Pedigree Override?	<p>If a user has manually overridden the pedigree priority to use this pedigree there will be a “Yes” in this column</p>
Value (This Pedigree)	<p>The field value of the Periodic Raw Activity Data (PRAD). This value may not equal that of the matching Accepted value because part, whole or none of a Pedigreed value may be used to create a linked Accepted record.</p>
Days Available (This Pedigree)	<p>A Pedigreed Data record is for a month. Days Total indicates how many days in the month the record covers.</p>
Days Used (This Pedigree)	<p>Days Used indicates how many of the Days Total covered by the Pedigreed Data record are actually used by the linked Accepted Data record.</p>
Value (All Pedigrees)	<p>The Value of all pedigrees combined for this activity, month and asset (there may be multiple pedigrees for the month)</p>
Filter (to sum Value All Pedigrees)	<p>“*” or blank.</p> <p>This column can be filtered on the “*” to remove duplicates and allow summing of the Value (Accepted Data Item) column.</p>

The green fields are Periodic Activity Data / PAD / Accepted Data related fields.

The blue fields are Periodic Raw Activity Data / PRAD / Pedigreed Data related fields.



The yellow fields are Raw Activity Data / RAD / raw data related fields.

Each PAD may be created based on one or more PRADs; each PRAD may be created based on one or more RADs. (Each RAD may have been created by exactly zero or one network record.)



Consider the following example for “ElectricityBilling (includes network data)” and some common analysis scenarios:

Tenant Name	Activity Name	Asset Name	Month	Month From Date	ID (Accepted Data)	Data Type (Accepted Data)	Code (Accepted Data Item)	Value (Accepted Data Item)	Filter (Accepted Data)	Pedigree Data Source	Pedigree Usage Type	Pedigree Priority	ID (Pedigreed Data)	Code (Pedigreed Data Item)	Value (Pedigreed Data Item)	Used Value (Pedigreed Data Item)	Days Total (Pedigreed Data)	Days Used (Pedigreed Data)	Prioritised (Pedigreed Data Item)	Measurement Device Name	ID (Raw Activity Data)
au.com.test	Electricity	Asset 111	Mar-15	01/MAR/15 12:00:00.000000000 AM	318629	ACTUAL	Qty-Electricity	3406.2527	*	Supplier Electronic	Actual	0	370947	Qty-Electricity	3406.252747	3406.25275	31	31	0	2050633419	290239
au.com.test	Electricity	Asset 111	Mar-15	01/MAR/15 12:00:00.000000000 AM	318629	ACTUAL	Qty-Electricity	3406.2527	*	Supplier Electronic	Actual	0	370947	Qty-Electricity	3406.252747	3406.25275	31	31	0	2050633419	297960
au.com.test	Electricity	Asset 111	Apr-15	01/APR/15 12:00:00.000000000 AM	318630	ACTUAL	Qty-Electricity	1832.575	*	Supplier Electronic	Actual	0	370948	Qty-Electricity	1832.575009	1832.57501	30	30	0	2050633419	290239
au.com.test	Electricity	Asset 111	Apr-15	01/APR/15 12:00:00.000000000 AM	318630	ACTUAL	Qty-Electricity	1832.575	*	Supplier Electronic	Actual	0	370948	Qty-Electricity	1832.575009	1832.57501	30	30	0	2050633419	297960
au.com.test	Electricity	Asset 111	Apr-15	01/APR/15 12:00:00.000000000 AM	318630	ACTUAL	Qty-Electricity	1832.575	*	Supplier Electronic	Actual	0	370948	Qty-Electricity	1832.575009	1832.57501	30	30	0	2050633419	298048
au.com.test	Electricity	Asset 111	May-15	01/MAY/15 12:00:00.000000000 AM	331889	ACTUAL	Qty-Electricity	1188.7978	*	Supplier Electronic	Actual	0	399288	Qty-Electricity	1188.797753	1188.79775	31	31	0	2050633419	298048
au.com.test	Electricity	Asset 222	Jun-14	01/JUN/14 12:00:00.000000000 AM	299457	ACTUAL	Qty-Electricity	645.42	*	EDMS Generated	Estimated	6	352432	Qty-Electricity	645.4189024	645.418902	30	30	0	QA14368799	273118
au.com.test	Electricity	Asset 222	Jul-14	01/JUL/14 12:00:00.000000000 AM	304261	ACTUAL	Qty-Electricity	594.8026	*	Supplier Electronic	Actual	0	367987	Qty-Electricity	168.9677419	168.967742	9	9	0	QA14368799	287895
au.com.test	Electricity	Asset 222	Jul-14	01/JUL/14 12:00:00.000000000 AM	304261	ACTUAL	Qty-Electricity	594.8026	*	EDMS Generated	Estimated	6	358776	Qty-Electricity	600.04	425.834839	31	22	0	QA14368799	278954
au.com.test	Electricity	Asset 222	Aug-14	01/AUG/14 12:00:00.000000000 AM	304262	ACTUAL	Qty-Electricity	582.0	*	Supplier Electronic	Actual	0	367988	Qty-Electricity	582	582	31	31	0	QA14368799	287895

The report has been filtered on the Code (Accepted Data Item) column for “Qty-Electricity”.

## Scenario 1

At first glance it might appear that there are duplicates in this report. For example, there are three Accepted Data rows (highlighted orange) all for the same asset, activity and month. The values in column ID (Accepted Data) are all the same proving that they are indeed the same Accepted Data record.

We might then expect there to be multiple Pedigreed records contributing. The values in columns Pedigree Data Source and Pedigree Usage Type are the same, as are the ID (Pedigreed Data) values. This suggests that only one pedigree of data and one Pedigreed data record was used in creating the Accepted Data record.

We then look at the Raw Activity Data. While the values in Measurement Device Name column are all the same, the values in ID (Raw Activity data) are all different. This tells us that three distinct raw data records (all with the same pedigree off-screen) combined to create the one Pedigreed data record.

## Scenario 2

If you wished to sum the Qty-Electricity for Asset 111 from March 2015 to May 2015 you would filter on Asset Name as “Asset 111”.

You cannot yet sum on the column Value (Accepted Data Item) as the data is listed multiple times (because of the multiple underlying Raw data records contributing).

Introduce a filter on the column Filter (Accepted Data) for “\*”. This then reduces the output to a single row per asset / activity / month combination.

The “\*” is assigned to one and only one row for each asset / activity / month combination in the report allowing the records to be filtered. [It is assigned to the same row that displays the linked RAD with the lowest ID (Raw Activity Data) as this guarantees a consistent and predictable output.]

### Scenario 3

Another example where it might seem there are duplicate sin the report, are the two Accepted Data rows (highlighted purple) for the same asset, activity and month. The values in column ID (Accepted Data) are all the same proving that they are indeed the same Accepted Data record.

The values in columns Pedigree Data Source and Pedigree Usage Type are different, as are their ID (Pedigreed Data) values. This suggests that two different Pedigreed record, each with a different pedigree, were combined to product the one Accepted Data record.

If two Pedigreed records with different pedigrees existed for the whole month, only the pedigree with the smallest Priority number would be used. If both are used, it means that for at least one day, only one pedigree record was in effect. That is why a lesser Priority record would be used.