ASP Mining Starter Pack - Data Dictionary Cubes

Version	Author	Comments
2020.09.10	Andres Ulloa	Document Creation

ASPMining.Analytics.EquipmentCube

Measures

• measure **Capacity** (enabled)

sourceProperty: Capacity

• measure **LastActivity** (enabled)

sourceProperty: LastUnifiedEvent.EventDateTime

Dimensions

- dimension **Equipment** (enabled)
 - hierarchy **H1** (enabled)
 - level **CategoryName** (enabled, type=data, sourceProperty=EquipmentCategory.Description) with display name = Group Name

 [Equipment>H1>CategoryName]
 - level **EquipmentName** (enabled, type=data, sourceProperty=Name) with display name = Equipment Name

 [Equipment>H1>EquipmentName]
- dimension **LastActivity** (enabled)

sourceProperty: LastUnifiedEvent.EventDateTime

- hierarchy **H1** (enabled)
 - level **EventDateDay** (enabled, type=time)

 [LastActivity>H1>EventDateDay]
 - level **EventDateHour** (enabled, type=time)
 [LastActivity>H1>EventDateHour]
 - level **EventDateMinute** (enabled, type=time)

[LastActivity>H1>EventDateMinute]

• dimension **Model** (enabled)

• hierarchy **H1** (enabled)

- level **Model** (enabled, type=data, sourceProperty=EquipmentModel.Description) with display name
- = Equipment Model

[Model>H1>Model]

ASPMining.Analytics.OEMEventsCube

Measures

• measure **Value** (enabled)

sourceProperty: Value

Dimensions

• dimension **Event** (enabled)

sourceProperty: ReadTime

- hierarchy **H1** (enabled)
 - level **ReadTime** (enabled, type=time)

[Event>H1>ReadTime]

- dimension **Name** (enabled)
 - hierarchy **H1** (enabled)
 - level **EquipmentName** (enabled, type=data, sourceProperty=Equipment.Name)

 [Name>H1>EquipmentName]
 - hierarchy **H2** (enabled)
 - level **EquipmentModel** (enabled, type=data, sourceProperty=Equipment.EquipmentModel.Description)

 [Name>H2>EquipmentModel]
 - hierarchy **H3** (enabled)
 - level **EquipmentCategory** (enabled, type=data, sourceProperty=Equipment.EquipmentCategory.Description)

 [Name>H3>EquipmentCategory]

ASPMining.Analytics.ProductionEventsCube **Measures** • measure **Capacity** (enabled) sourceProperty: Equipment.Capacity • measure **Duration** (enabled) sourceProperty: Duration • measure **MeasuredTons** (enabled) sourceProperty: MeasuredTons **Dimensions** • dimension **Equipment** (enabled) • hierarchy **H2** (enabled) • level Category (enabled, type=data, sourceProperty=Equipment.EquipmentCategory.Description) [Equipment>H2>Category] • hierarchy **H1** (enabled) • level **Name** (enabled, type=data, sourceProperty=Equipment.Name) [Equipment>H1>Name] • hierarchy **H3** (enabled) • level **Model** (enabled, type=data, sourceProperty=Equipment.EquipmentModel.Description) [Equipment>H3>Model]

- dimension **Location** (enabled)
 - hierarchy **H1** (enabled)

```
• level Name (enabled, type=data, sourceProperty=Location.Name)
           [Location>H1>Name]
      • hierarchy H2 (enabled)
           • level Grade (enabled, type=data, sourceProperty=Location.Grade)
           [Location>H2>Grade]
• dimension PreviousLocation (enabled)
      • hierarchy H1 (enabled)
           • level Name (enabled, type=data, sourceProperty=PreviousLocation.Name)
           [PreviousLocation>H1>Name]
      • hierarchy H2 (enabled)
           • level Grade (enabled, type=data, sourceProperty=PreviousLocation.Grade)
           [PreviousLocation>H2>Grade]
• dimension ProductionStatus (enabled)
      • hierarchy H1 (enabled)
           • level Description (enabled, type=data, sourceProperty=ProductionStatusType.Description)
           [ProductionStatus>H1>Description]
• dimension Shift (enabled)
      • hierarchy H1 (enabled)
           • level Id (enabled, type=data, sourceProperty=Shift.Id)
           [Shift>H1>Id]
      • hierarchy H2 (enabled)
           • level Type (enabled, type=data, sourceProperty=Shift.ShiftType.Type)
           [Shift>H2>Type]
```

• dimension **StartTime** (enabled)

sourceProperty: StartTime

- hierarchy **H1** (enabled)
 - level **StartTimeDay** (enabled, type=time) [StartTime>H1>StartTimeDay]
 - level **StartTimeHour** (enabled, type=time)
 [StartTime>H1>StartTimeHour]
 - level **StartTimeMinute** (enabled, type=time)
 [StartTime>H1>StartTimeMinute]

ASPMining.Analytics.StatusEventSlicedCube

Measures

• measure **PartialDuration** (enabled)

sourceProperty: PartialDuration

• measure **PartialDurationAVG** (enabled)

sourceProperty: PartialDuration

Dimensions

- dimension **Equipment** (enabled)
 - hierarchy **H1** (enabled)
 - level **Category** (enabled, type=data, sourceProperty=Equipment.EquipmentCategory.Name) with display name = Category

 [Equipment>H1>Category]
 - level **Name** (enabled, type=data, sourceProperty=Equipment.Name) with display name = Name [Equipment>H1>Name]
- dimension **Reason** (enabled)
 - hierarchy **H1** (enabled)
 - level **Description** (enabled, type=data, sourceProperty=StatusReason.Description) [Reason>H1>Description]
- dimension **ShiftDate** (enabled)

sourceProperty: Shift.DateTime

```
• hierarchy H1 (enabled)
           • level DateTimeYear (enabled, type=time)
           [ShiftDate>H1>DateTimeYear]
           • level DateTimeMonth (enabled, type=time)
           [ShiftDate>H1>DateTimeMonth]
           • level DateTimeDay (enabled, type=time)
           [ShiftDate>H1>DateTimeDay]
           • level DateTimeMinute (enabled, type=time)
           [ShiftDate>H1>DateTimeMinute]
• dimension ShiftInfo (enabled)
      • hierarchy H1 (enabled)
           • level ShiftId (enabled, type=data, sourceProperty=Shift.Id)
           [ShiftInfo>H1>ShiftId]
      • hierarchy H2 (enabled)
           • level ShiftType (enabled, type=data, sourceProperty=Shift.ShiftType.Type)
           [ShiftInfo>H2>ShiftType]
      • hierarchy H3 (enabled)
           • level CrewName (enabled, type=data, sourceProperty=Shift.Crew.Name)
           [ShiftInfo>H3>CrewName]
• dimension ShiftType (enabled)
      • hierarchy H1 (enabled)
           • level Type (enabled, type=data, sourceProperty=Shift.ShiftType.Type)
           [ShiftType>H1>Type]
```

• dimension **SliceStartDate** (enabled)

```
sourceProperty: SliceStartDate
      • hierarchy H1 (enabled)
           • level SliceStartDateYear (enabled, type=time)
           [SliceStartDate>H1>SliceStartDateYear]
           • level SliceStartDateMonth (enabled, type=time)
           [SliceStartDate>H1>SliceStartDateMonth]
           • level SliceStartDateDay (enabled, type=time)
           [SliceStartDate>H1>SliceStartDateDay]
           • level SliceStartDateHour (desenabled, type=time)
           [SliceStartDate>H1>SliceStartDateHour]
           • level SliceStartDateMinute (enabled, type=time)
           [SliceStartDate>H1>SliceStartDateMinute]
• dimension StatusType (enabled)
      • hierarchy H1 (enabled)
           • level StatusType (enabled, type=data, sourceProperty=StatusType.Description)
           [StatusType>H1>StatusType]
```

Listings

• listing **ListingDetails** (enabled) with display name = Equipment Name

Partial Duration

ASPMining. Analytics. Unified Events Cube

Measures

• measure **AvgTravelTime** (enabled)

sourceProperty: Trip.AvgTravelTime

• measure **Capacity** (enabled)

sourceProperty: Equipment.Capacity

• measure **CapacityMax** (enabled)

sourceProperty: Equipment.Capacity

• measure **Duration** (enabled)

sourceProperty: Duration

• measure **MeasuredTons** (enabled)

sourceProperty: ProductionEvent.MeasuredTons

• measure **OperativeDuration** (enabled)

sourceProperty: OperativeDuration

• measure **ReferenceTravelTime** (enabled)

sourceProperty: Trip.ReferenceTravelTime

• measure **StatusEventDuration** (enabled)

sourceProperty: StatusEvent.Duration

• measure **TripTime** (enabled)

Dimensions

- dimension **Crew** (enabled)
 - hierarchy **H1** (enabled)
 - level **CrewName** (enabled, type=data, sourceProperty=Shift.Crew.Name)

 [Crew>H1>CrewName]
- dimension **Equipment** (enabled)
 - hierarchy **H1** (enabled)
 - level **EquipmentCategory** (enabled, type=data, sourceProperty=Equipment.EquipmentCategory.Name)

 [Equipment>H1>EquipmentCategory]
 - level **EquipmentName** (enabled, type=data, sourceProperty=Equipment.Name)

 [Equipment>H1>EquipmentName]
- dimension **EventDateTime** (enabled)

sourceProperty: EventDateTime

- hierarchy **H1** (enabled)
 - level **EventDateTimeYear** (enabled, type=time)
 [EventDateTime>H1>EventDateTimeYear]
 - $\bullet \ \ \mathsf{level} \ \textbf{EventDateTimeMonth} \ \ (\mathsf{enabled}, \ \mathsf{type=time})$

[EventDateTime>H1>EventDateTimeMonth]

- level **EventDateTimeDay** (enabled, type=time)
- [EventDateTime>H1>EventDateTimeDay]
- level **EventDateTimeHour** (enabled, type=time)

[EventDateTime>H1>EventDateTimeHour]

• level **EventDateTimeMinute** (enabled, type=time)

[EventDateTime>H1>EventDateTimeMinute]

- dimension **Location** (enabled)
 - hierarchy **H1** (enabled)
 - level **LocationName** (enabled, type=data, sourceProperty=ProductionEvent.Location.Name) [Location>H1>LocationName]
- dimension **PreviousLocation** (enabled)
 - hierarchy **H1** (enabled)
 - level **PreviousLocationName** (enabled, type=data, sourceProperty=ProductionEvent.PreviousLocation.Name)
 [PreviousLocation>H1>PreviousLocationName]
- dimension **ProductionEvent** (enabled)
 - hierarchy **H1** (enabled)
 - level **ProductionStatusType** (enabled, type=data, sourceProperty=ProductionEvent.ProductionStatusType.Description)
 [ProductionEvent>H1>ProductionStatusType]
- dimension **ProductionEventStartTime** (enabled)

sourceProperty: ProductionEvent.StartTime

- hierarchy **H1** (enabled)
 - level **ProductionEventStartTimeDay** (enabled, type=time)
 [ProductionEventStartTime>H1>ProductionEventStartTimeDay]
 - level **ProductionEventStartTimeMinute** (enabled, type=time)

[ProductionEventStartTime>H1>ProductionEventStartTimeMinute]

• dimension **ShiftDateTime** (enabled)

sourceProperty: Shift.DateTime

- hierarchy **H1** (enabled)
 - level **ShiftDateTimeDay** (enabled, type=time)
 [ShiftDateTime>H1>ShiftDateTimeDay]
 - level **ShiftDateTimeHour** (enabled, type=time)

[ShiftDateTime>H1>ShiftDateTimeHour]

• dimension **ShiftType** (enabled)

- hierarchy **H1** (enabled)
 - level **Type** (enabled, type=data, sourceProperty=Shift.ShiftType.Type)
 [ShiftType>H1>Type]
 - level **Id** (enabled, type=data, sourceProperty=Shift.Id)

 [ShiftType>H1>Id]

• dimension **StatusEvent** (enabled)

- hierarchy **H1** (enabled)
 - level **StatusReason** (enabled, type=data, sourceProperty=StatusEvent.StatusReason.Description) [StatusEvent>H1>StatusReason]
- hierarchy **H2** (enabled)
 - level **StatusTypeInsideReason** (enabled, type=data, sourceProperty=StatusEvent.StatusReason.StatusType.Description)
 [StatusEvent>H2>StatusTypeInsideReason]
- hierarchy **H3** (enabled)
 - level **StatusType** (enabled, type=data, sourceProperty=StatusEvent.StatusType.Description) [StatusEvent>H3>StatusType]

• dimension **StatusEventStartDate** (enabled)

sourceProperty: StatusEvent.StartDate

- hierarchy **H1** (enabled)
 - level **StatusEventStartDateDay** (enabled, type=time)

[StatusEventStartDate>H1>StatusEventStartDateDay]

• level **StatusEventStartDateMinute** (enabled, type=time)

[StatusEventStartDate>H1>StatusEventStartDateMinute]

• dimension **Trip** (enabled)

- hierarchy **H1** (enabled)
 - level **TripName** (enabled, type=data, sourceProperty=Trip.Name)

[Trip>H1>TripName]

- hierarchy **H2** (enabled)
 - level **Destination** (enabled, type=data, sourceProperty=Trip.DestinationLocation.Name) [Trip>H2>Destination]
- hierarchy **H3** (enabled)
 - level **Origin** (enabled, type=data, sourceProperty=Trip.OriginLocation.Name)

 [Trip>H3>Origin]
- hierarchy **H4** (enabled)
 - level **ReferenceTravelTime** (enabled, type=data, sourceProperty=Trip.ReferenceTravelTime) [Trip>H4>ReferenceTravelTime]
- hierarchy **H5** (enabled)
 - level **TravelCount** (enabled, type=data, sourceProperty=Trip.TravelCount) [*Trip>H5>TravelCount*]
- hierarchy **H6** (enabled)

```
• dimension TripTime (enabled)
      • hierarchy H1 (enabled)
          • level TripTime (enabled, type=data, sourceProperty=TripTime)
          [TripTime>H1>TripTime]
      • hierarchy H2 (enabled)
          • level ReferenceTravelTime (enabled, type=data, sourceProperty=Trip.ReferenceTravelTime)
          [TripTime>H2>ReferenceTravelTime]
  Listings
• listing Listado1 (enabled)
  Calculated Members
• calculated member CapacityPerformance (enabled)
dimension: memberDimension
valueExpression: [Measures].[MeasuredTons]/ [Measures].[Capacity]
• calculated member OEE (enabled)
dimension: memberDimension
valueExpression: [MEMBERDIMENSION].[Utilization]* [MEMBERDIMENSION].[CapacityPerformance]*
[MEMBERDIMENSION].[TimePerformance]
• calculated member TimePerformance (enabled)
dimension: memberDimension
valueExpression: [Measures].[AvgTravelTime]/[Measures].[TripTime]
```

• level **TotalTravelTime** (enabled, type=data, sourceProperty=Trip.TotalTravelTime)

[Trip>H6>TotalTravelTime]

• calculated member **Utilization** (enabled)

dimension: memberDimension

valueExpression: [Measures].[OperativeDuration] / [Measures].[Duration]