

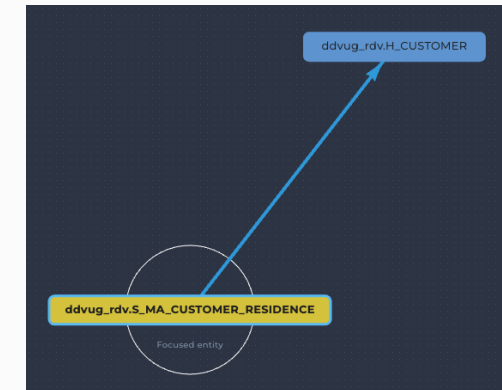
Multi-active satellite (2.1)

- Option 1:
 - ADE standard SAT_MA entity type for multi-active satellite was used.
 - ADE uses a sub-sequence number (dv_running_id), which is calculated by business key (kundeid)
 - Hash difference (dv_datahash) is calculated for ordered array of records (LISTAGG()) per the business key
 - Multi-active satellite in ADE historizes all records:

```
1 select
2   dv_id,
3   dv_datahash,
4   dv_load_time,
5   dv_running_id,
6   kundeid,
7   von,
8   bis,
9   strasse,
10  hausnummer
11 from ddvug_rdv.s_ma_customer_residence
12 where kundeid in (1, 344)
13 order by kundeid, von;
```



> [See performance \(1\)](#)

| | dv_id | dv_datahash | dv_load_time | dv_running_id | kundeid | von | bis | strasse | hausnummer |
|---|----------------------------------|----------------------------------|-------------------------------|---------------|---------|------------|------------|---------------------|------------|
| 1 | c4ca4238a0b923820dcc509a6f75849b | 8c1d0266991d90c7843fb0051f555754 | 2024-09-13T11:05:49.292+00:00 | 1 | 1 | 1998-04-09 | 1999-03-18 | Neusser Straße | 197 |
| 2 | c4ca4238a0b923820dcc509a6f75849b | 8c1d0266991d90c7843fb0051f555754 | 2024-09-13T11:05:49.292+00:00 | 2 | 1 | 1999-03-19 | 2020-11-03 | Hohes Feld | 113 |
| 3 | c4ca4238a0b923820dcc509a6f75849b | 8c1d0266991d90c7843fb0051f555754 | 2024-09-13T11:05:49.292+00:00 | 3 | 1 | 2020-11-04 | null | Hohenrother Stra... | 13 |
| 4 | b3967a0e938dc2a6340e258630feb5a | f656f95836ce54eaa37b3340fc919dfd | 2024-09-13T11:15:27.724+00:00 | 1 | 344 | 1988-11-16 | 1992-08-25 | Niederseeibach | 83 |
| 5 | b3967a0e938dc2a6340e258630feb5a | f656f95836ce54eaa37b3340fc919dfd | 2024-09-13T11:15:27.724+00:00 | 2 | 344 | 1992-08-26 | null | Köttenicher Straße | 179 |
| 6 | b3967a0e938dc2a6340e258630feb5a | 437283525f34d3a9b4ec2cd6a9e5f92f | 2024-09-13T11:24:23.189+00:00 | 1 | 344 | 2008-04-27 | 2010-08-04 | Niederseeibach | 83 |
| 7 | b3967a0e938dc2a6340e258630feb5a | 437283525f34d3a9b4ec2cd6a9e5f92f | 2024-09-13T11:24:23.189+00:00 | 2 | 344 | 2010-08-05 | null | Köttenicher Straße | 179 |












Multi-active satellite (2.2)










- In the current default loading logic, ADE does not support adding multi-active key (von) for SAT_MA loads
 - With custom templates, that can be achieved
- For SAT_MA entities, a current view with entity type SAT_MA_C is created
 - Current satellite is ADE's automatically generated view on top of satellite table to extract the most recent record based on load time
 - For multi-active satellite, there can be multiple active records in the current view

| | |
|-------------------------------------------------------------------------------------------------------------------------|----------|
|  ddvug_rdv.S_MA_CUSTOMER_RESIDENCE | SAT_MA |
|  ddvug_rdv.S_MA_CUSTOMER_RESIDENCE_C | SAT_MA_C |

Multi-active satellite

|  dv_id |  dv_datahash |  dv_load_time |  dv_running_id |  kundeid |  von |  bis |  strasse |  hausnummer | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----|
| c4ca4238a0b923820dcc509a6f75849b | 8c1d0266991d90c7843fb0051f555754 | 2024-09-13T11:05:49.292+00:00 | | 1 | 1998-04-09 | 1999-03-18 | Neusser Straße | 197 | |
| c4ca4238a0b923820dcc509a6f75849b | 8c1d0266991d90c7843fb0051f555754 | 2024-09-13T11:05:49.292+00:00 | | 2 | 1999-03-19 | 2020-11-03 | Hohes Feld | 113 | |
| c4ca4238a0b923820dcc509a6f75849b | 8c1d0266991d90c7843fb0051f555754 | 2024-09-13T11:05:49.292+00:00 | | 3 | 2020-11-04 | <i>null</i> | Hohenrother Stra... | 13 | |
| b3967a0e938dc2a6340e258630febd5a | f656f95836ce54eaa37b3340fc919dfd | 2024-09-13T11:15:27.724+00:00 | | 1 | 344 | 1988-11-16 | 1992-08-25 | Niederseelbach | 83 |
| b3967a0e938dc2a6340e258630febd5a | f656f95836ce54eaa37b3340fc919dfd | 2024-09-13T11:15:27.724+00:00 | | 2 | 344 | 1992-08-26 | <i>null</i> | Köttenicher Straße | 179 |
| b3967a0e938dc2a6340e258630febd5a | 437283525f34d3a9b4ec2cd6a9e5f92f | 2024-09-13T11:24:23.189+00:00 | | 1 | 344 | 2008-04-27 | 2010-08-04 | Niederseelbach | 83 |
| b3967a0e938dc2a6340e258630febd5a | 437283525f34d3a9b4ec2cd6a9e5f92f | 2024-09-13T11:24:23.189+00:00 | | 2 | 344 | 2010-08-05 | <i>null</i> | Köttenicher Straße | 179 |

Current view of multi-active satellite

|  dv_id |  dv_datahash |  dv_load_time |  dv_running_id |  kundeid |  von |  bis |  strasse |  hausnummer | |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----|
| c4ca4238a0b923820dcc509a6f75849b | 8c1d0266991d90c7843fb0051f555754 | 2024-09-13T11:05:49.292+00:00 | | 1 | 1998-04-09 | 1999-03-18 | Neusser Straße | 197 | |
| c4ca4238a0b923820dcc509a6f75849b | 8c1d0266991d90c7843fb0051f555754 | 2024-09-13T11:05:49.292+00:00 | | 2 | 1999-03-19 | 2020-11-03 | Hohes Feld | 113 | |
| c4ca4238a0b923820dcc509a6f75849b | 8c1d0266991d90c7843fb0051f555754 | 2024-09-13T11:05:49.292+00:00 | | 3 | 2020-11-04 | <i>null</i> | Hohenrother Stra... | 13 | |
| b3967a0e938dc2a6340e258630febd5a | 437283525f34d3a9b4ec2cd6a9e5f92f | 2024-09-13T11:24:23.189+00:00 | | 1 | 344 | 2008-04-27 | 2010-08-04 | Niederseelbach | 83 |
| b3967a0e938dc2a6340e258630febd5a | 437283525f34d3a9b4ec2cd6a9e5f92f | 2024-09-13T11:24:23.189+00:00 | | 2 | 344 | 2010-08-05 | <i>null</i> | Köttenicher Straße | 179 |

Multi-active satellite (2.3)

- Option 2:
 - Modelling a one-way link, where link primary key is kundeid and von
 - It is then possible to add status tracking satellite and a satellite
 - The result is the same as with multi-active satellite, but status tracking satellite gives us better ability to track deletion status



| A ^B C kundeid | A ^B C dv_datahash | 1 ² 3 delivery_period | 1 ² 3 status | 📅 von | 📅 bis | A ^B C strasse | A ^B C hausnummer |
|--------------------------|----------------------------------|----------------------------------|-------------------------|------------|------------|--------------------------|-----------------------------|
| 1 | a1741895cae0915b675ac68ac144e2bb | 1 | 1 | 1998-04-09 | 1999-03-18 | Neusser Straße | 197 |
| 1 | 79657fe66842e89c50846a9064979d9e | 1 | 1 | 1999-03-19 | 2020-11-03 | Hohes Feld | 113 |
| 1 | 7d9379c9c00462da3c33758fe7462dd6 | 1 | 1 | 2020-11-04 | null | Hohenrother Stra... | 13 |
| 344 | 8caf18f1de2f130dc3e4dba3e96149a2 | 2 | 0 | 1988-11-16 | 1992-08-25 | Niederseelbach | 83 |
| 344 | 58e7f0643e99af66590ad1e6e6041234 | 2 | 0 | 1992-08-26 | null | Köttenicher Straße | 179 |
| 344 | 8e26eba090a8f96d7322718a17698692 | 3 | 1 | 2008-04-27 | 2010-08-04 | Niederseelbach | 83 |
| 344 | e1fc000b8f6f2168a3b66a233c325875 | 3 | 1 | 2010-08-05 | null | Köttenicher Straße | 179 |