

Blue Mobility Charging Ecosystem

End to end solution for charging infrastructure

E-mobility @ Siemens

Drive technology and charging solutions for sustainable future mobility

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Powertrain components for cars



Drive systems for commercial vehicles



High Power Charging systems for ecars



Charging systems for e buses



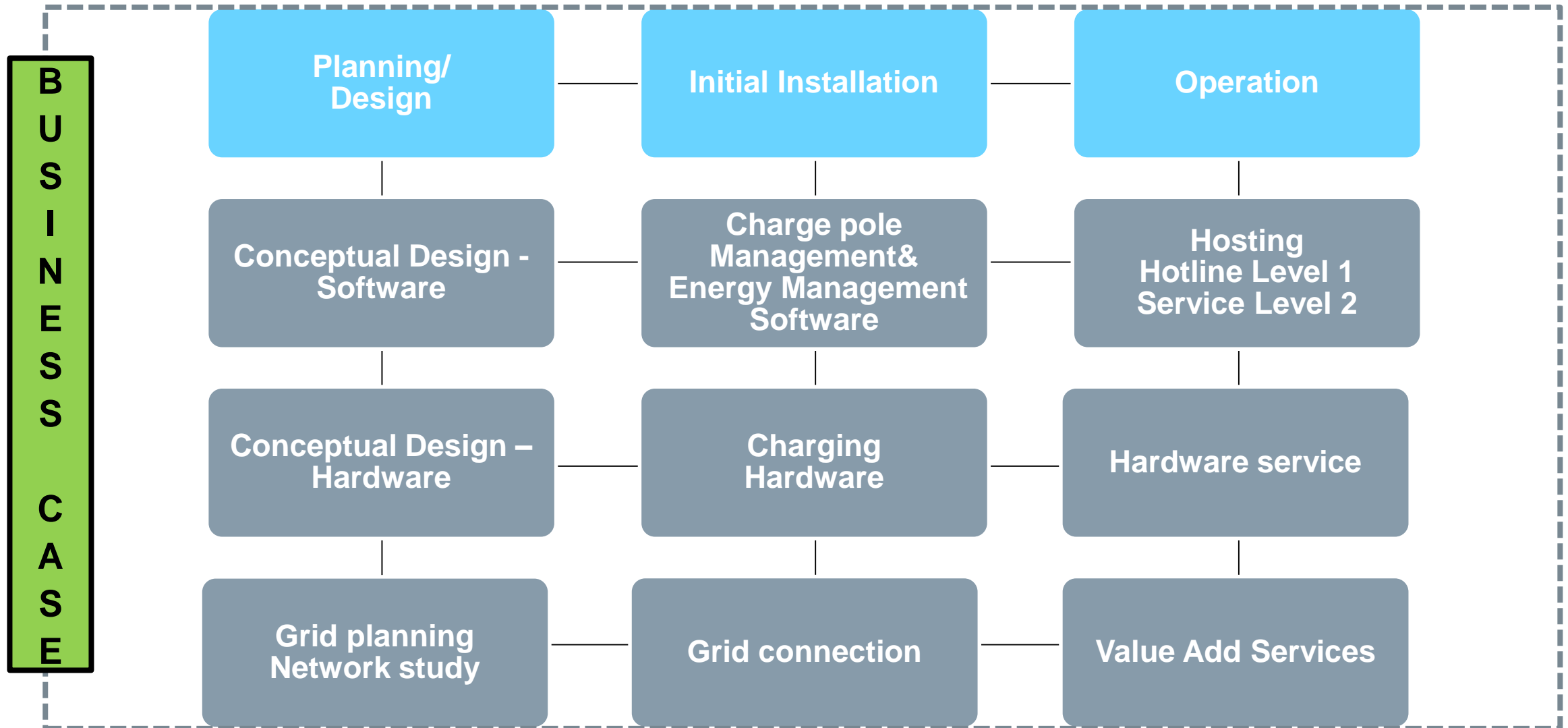
eHighway

Siemens charging technology for multiple applications

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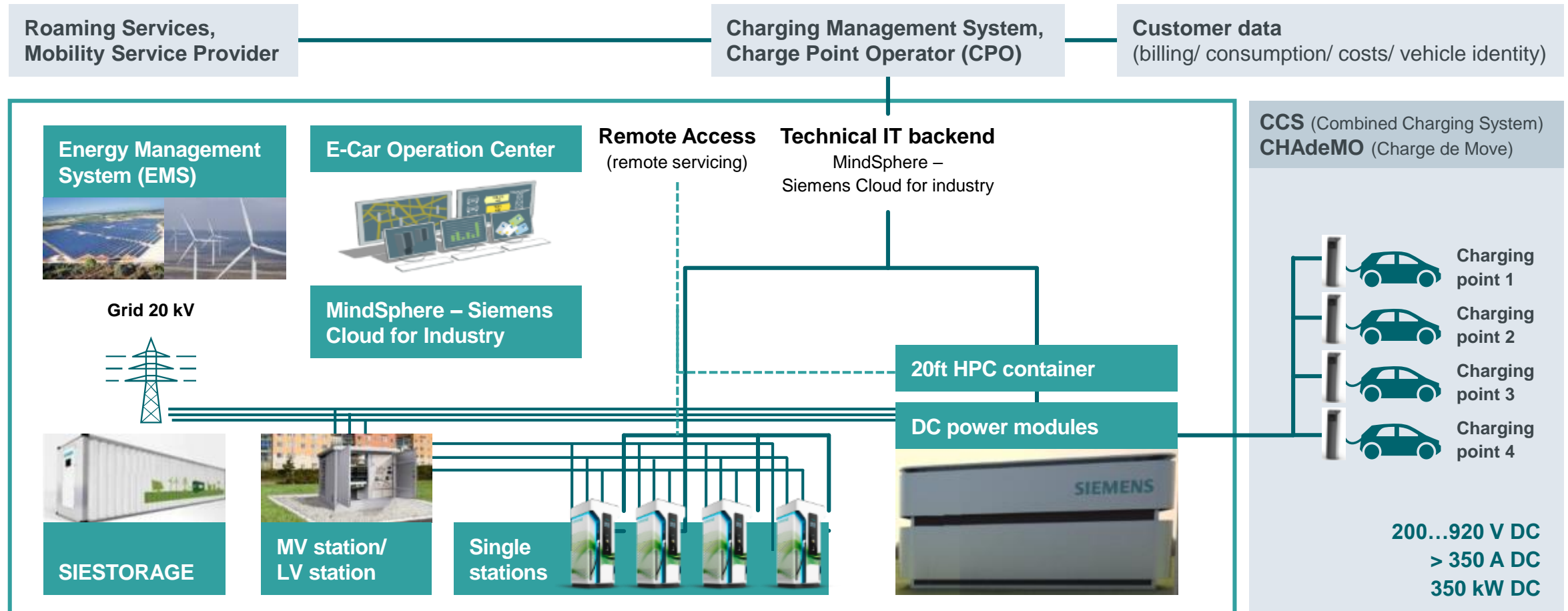


Integrated design, delivery and operation is the key for the successful operation of a charging network



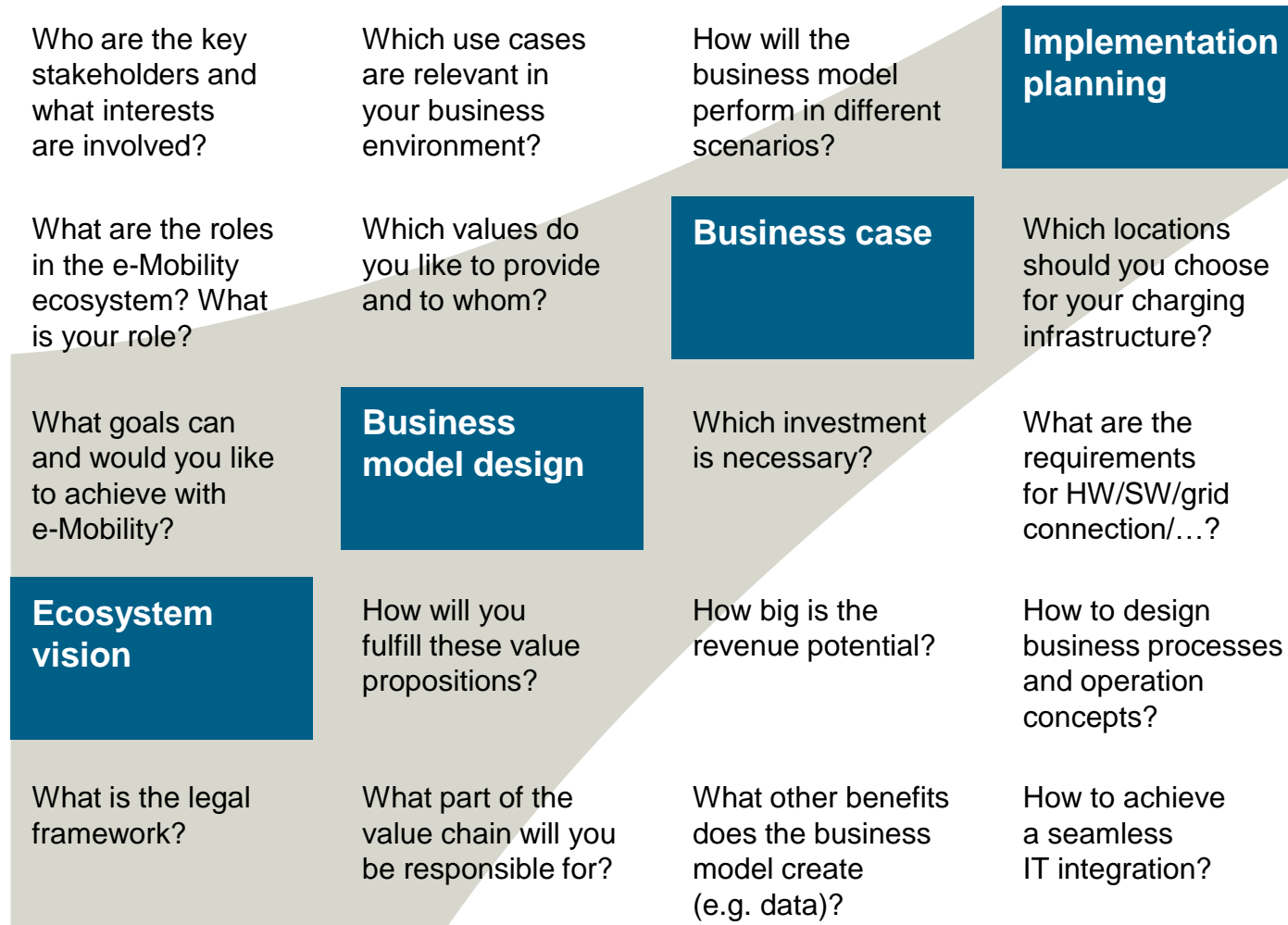
Typical scope of an e-Mobility charging solution

Seamless integration of all sub systems from Siemens



Your success in e-Mobility infrastructure projects depends on many aspects

Find the right answers with the support of Siemens!



Implementation support – Requirement analysis – Overview of aspects to be considered (selection)

Location	Charging station	Charging management system	Grid connection	Operating requirements
<ul style="list-style-type: none">• Parking space• Traffic management• Traffic volume• Driver behavior• Distance from grid connection• ...	<ul style="list-style-type: none">• Charging power• Charging plugs• Standards• Authentication• Backend system (Interface)• Communications (Remote access)• Security• Installation	<ul style="list-style-type: none">• Technical operating processes• Interfaces to charging stations• Interfaces to backend systems• Search function for (free) charging stations• Reservation function• Billing for e-Mobility services• Reporting functions• ...	<ul style="list-style-type: none">• Maximum power• Ring main units/ transformers• Cable• Protection concept• Protection and fuses• Energy management• Battery storage• ...	<ul style="list-style-type: none">• Customer support• Operations• Hardware maintenance• Software maintenance of CMS¹⁾• Operation and hosting of CMS¹⁾• ...

1) CMS = Charging Management System

1 | AC charging wall box and poles (≤ 22 kW)



- For use in residential garages, semi-public/public locations
- Type 2 plug connection
- Up to 32 A
- Voltage: 400 V

2 | Compact-Power-Charger (50;150 kW*)



- for use in public domain (e.g. urban gas stations, depots, enterprises and retail locations)
- all relevant charging standards:
 - CCS (Combined Charging System)
 - CHAdeMO
 - Type 2
- voltage range: 200V – 850/920V DC

*(150 kW CPC not yet released)

3 | High-Power-Charger



- for use in public domain (e.g. highway transit charging, urban gas stations, depots)
- all relevant DC-charging standards
 - CCS
 - CHAdeMO
- voltage range: 200V – 920V DC

4 | Multi-Charging-Systems

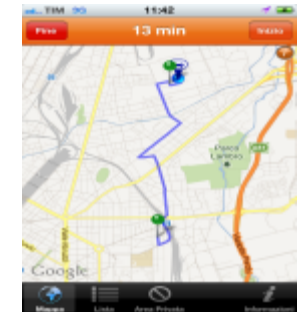
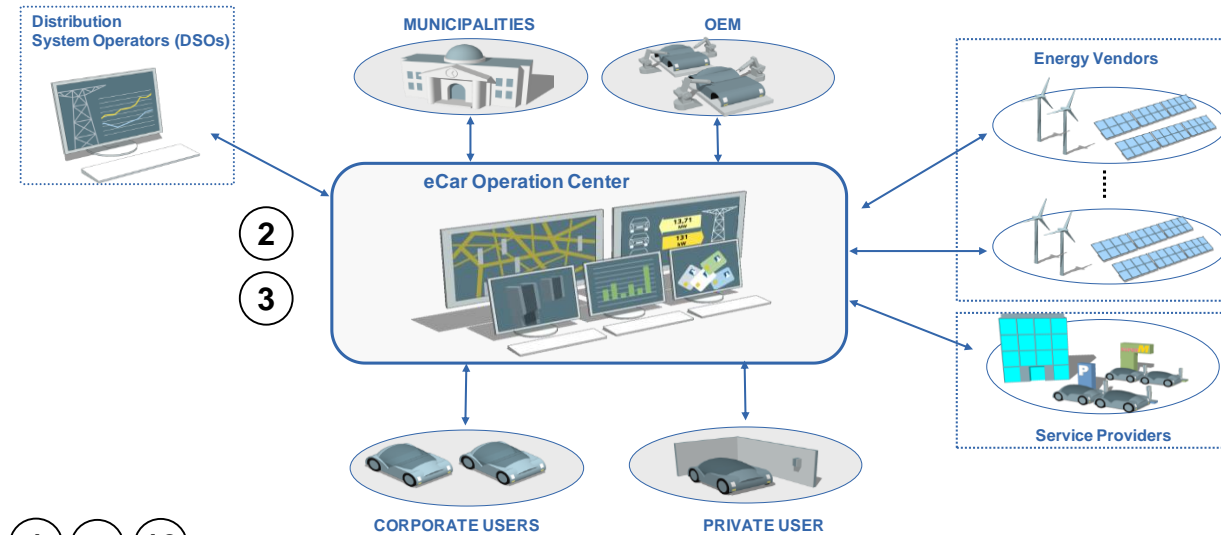


- for use in public domain (e.g. highway transit charging, depots)
- all relevant DC-charging standards
 - CCS, - CHAdeMO
- customer specific configuration
- voltage range: 200V – 920V DC

With the Siemens e-Car Operation Center we provide an IT system to manage the entire e-Mobility process

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- 1 Web based SaaS model
- 2 Usable by different stakeholders: user profiling and multi-tenancy
- 3 Full set of functionality for e-Mobility management
- 4 Management of different models / brands of charging units : OCPP standard
- 5 Complete solution including Web portal and Apps for drivers
- 6 Load management already included
- 7 Full integration with Smart Grid management applications
- 8 Roaming with external networks available
- 9 Credit card payment available
- 10 More than 4000 charging units already managed!!!



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