

OpenTele

en open source platform under fælles governance i 4S – muligheder og perspektiver

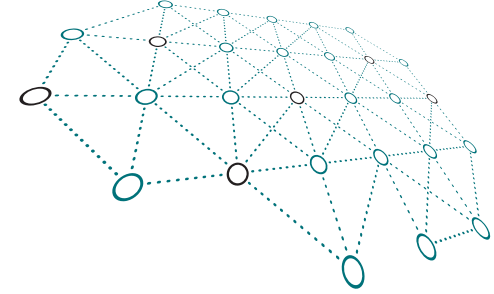
Morten Kyng, 7. oktober 2015, Alexandra Instituttet og Aarhus Universitet



STIFTELSEN FOR SOFTWAREBASEREDE SUNDHEDSSERVICES



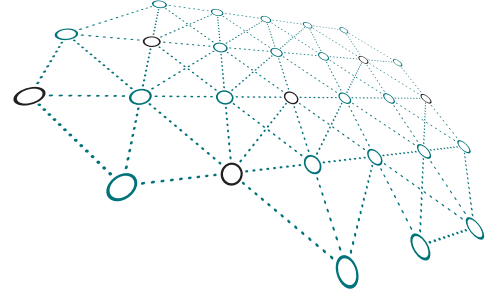
Baggrund: ØA



- Der udrulles KOL fra 2016 til 2019
- TelecareNord erfaringer
- Organiseres i fem landsdelsprogrammer
- Regionerne har vedtaget en infrastruktur baseret på
- Referencearkitekturen og OpenTele



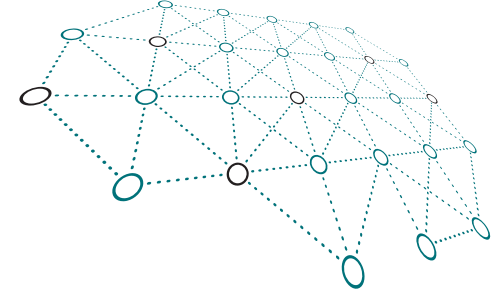
OpenTele



- Telemedicin og –sundhedsplatform
- Påbegyndt i Teleskejby-projektet
- Primært udviklet i demo-projekterne:
 - TelecareNord og
 - Klinisk integreret hjemmemonitorering
- Fra 'hack' via modning til microservices



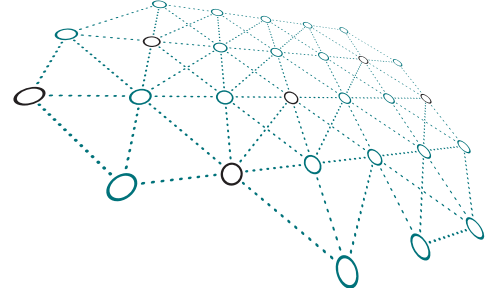
Baggrund



- De telemedicinske løsninger
 - er tekniske siloer
 - er dyre
 - har ikke søgbarhed på tværs
 - ingen integration til fagsystemer
 - svære at tilpasse forskellige behandlingsforløb
 - afhængig af leverandørens prioriteringer
 - er hele ”patient-til-behandler”-systemer
- Ringe markedsudvikling



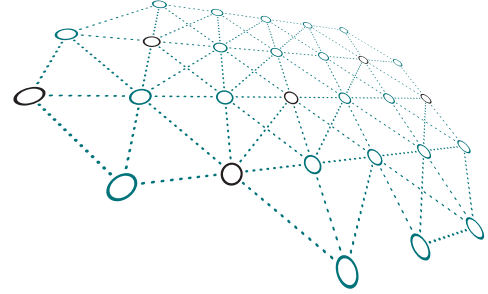
Hvordan videre?



- Referencearkitektur med
 - åbne snitflader baseret på
 - internationale standarder
- Flerleverandørstrategi
- Fællesoffentlig Open Source



Tilgangen: 4S



- En fællesoffentlig organisation der har governance

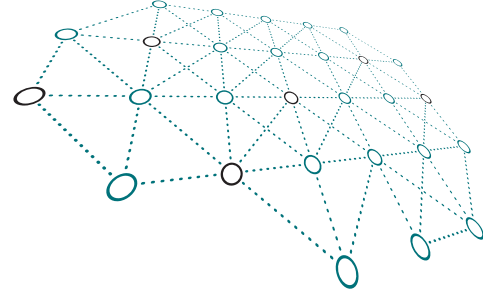
og eksplicit understøtter

- En flerleverandør-strategi med
- plads til SMVer og innovation



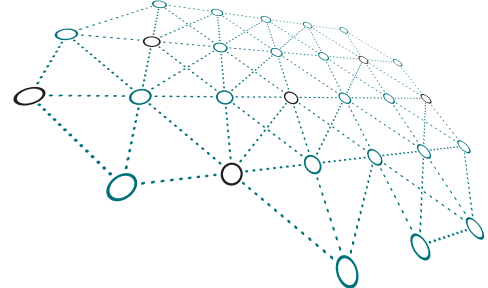


4S governance for open source



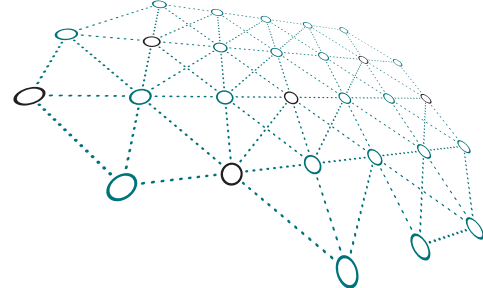
- OpenTele:
telemedicin og -sundhedsplatform
- KIH-DB: national database for datadeling
- Net4Care: infrastrukturværktøjer
til national referencearkitektur
- Open source in a box: test og udvikling
 - All the review in the world isn't as good as trying to implement a standard
 - End-to-end demonstrator of reference architecture on October 23, 2013 ☺

OpenTele funktionalitet



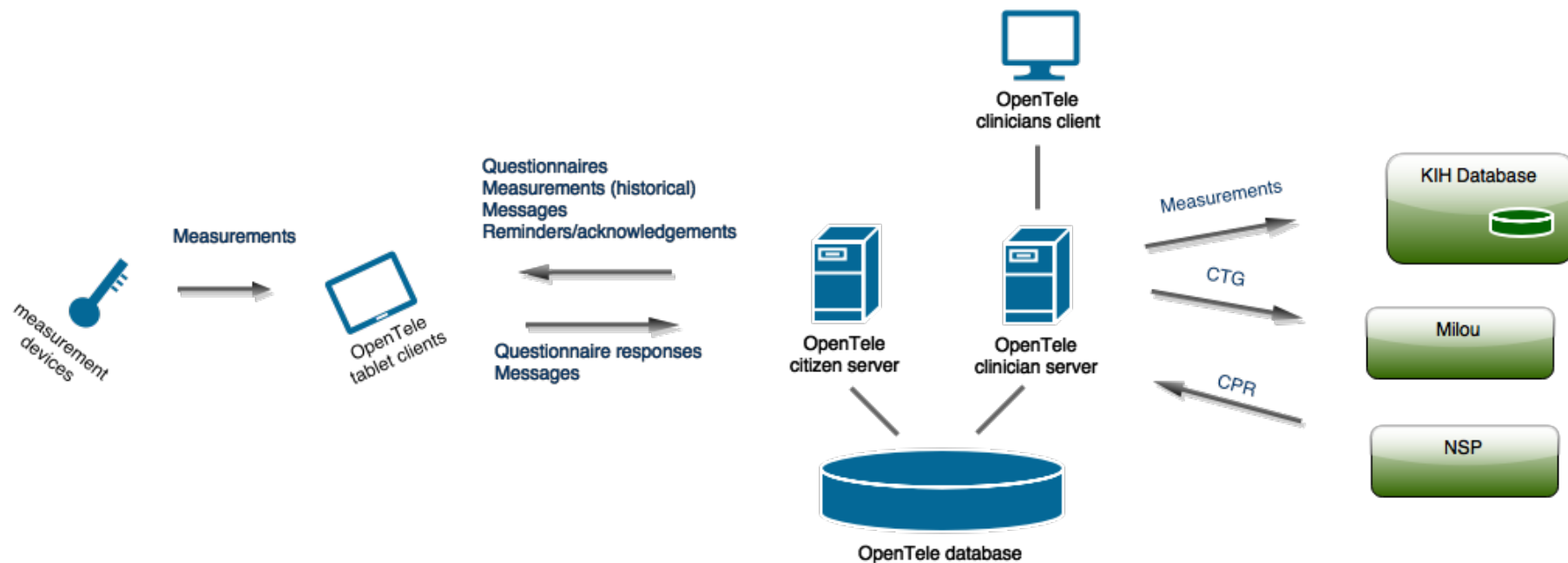
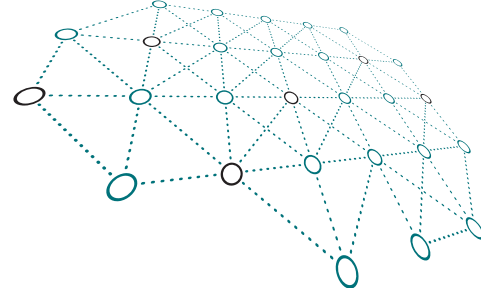
- Opsamling af helbredsdata hos borgeren
- Borgernes interaktion med data
- Sundhedspersonalets interaktion med data
- Datalagring i behandlingsforløb
- Transport af data til centrale databaser, fx KIH-DB

OpenTele udviklingen

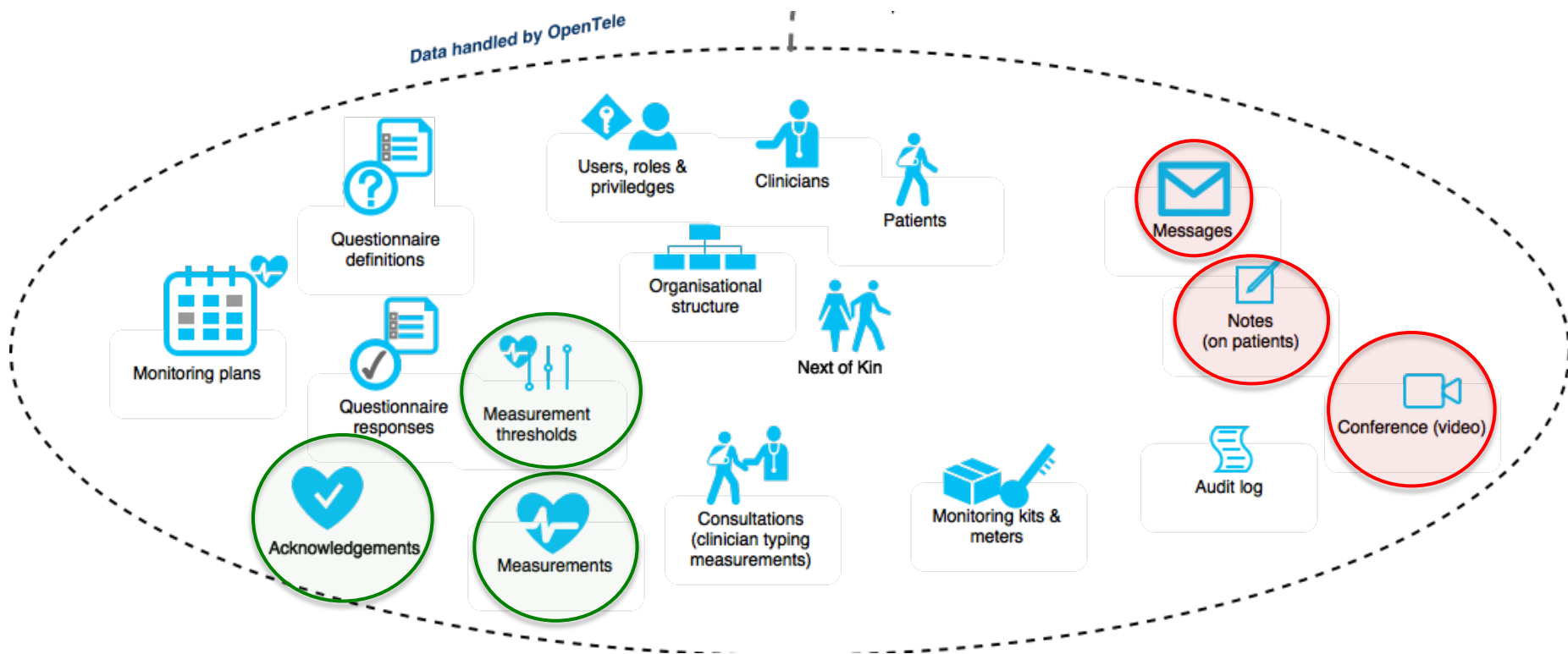
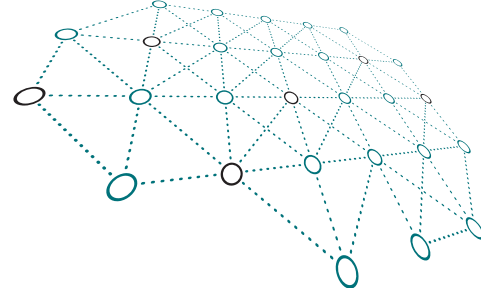


- fra 'hack' via modning til microservices
- Stor-skala i Telecare Nord-projektet: OpenTele 1
- Modningen i KIH-projektet: OpenTele 2.x
- Den nye generation m. microservices: OpenTele 3

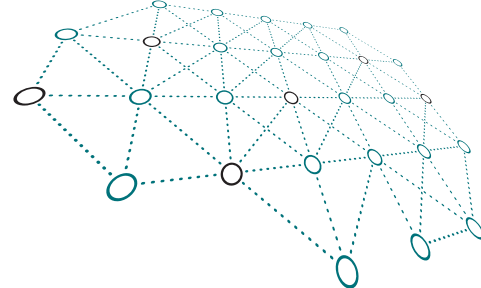
OpenTele 2.x



OpenTele 2.x



OpenTele 3



4S Wiki

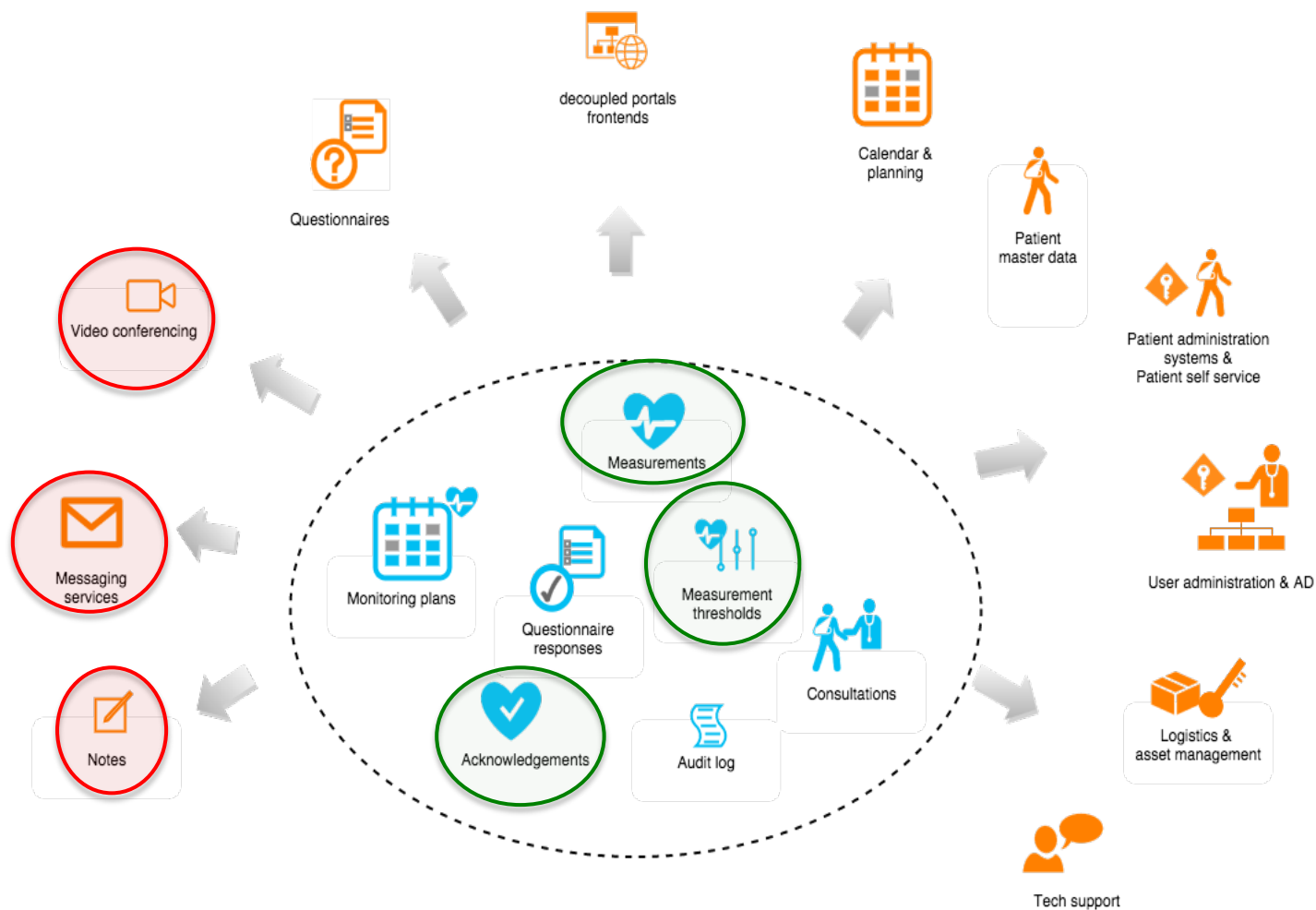
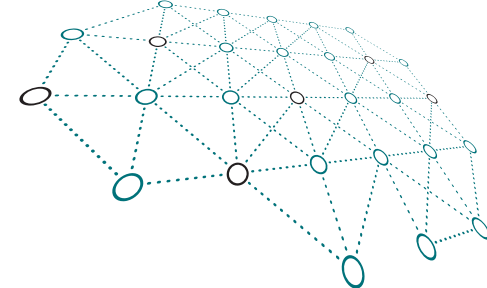
Towards OpenTele 3.0

Under the heading “OpenTele 3.0” we are working towards a revision of OpenTele that we hope will provide even better support for:

- Development and maintenance with multiple software suppliers working in parallel.
- Increased reuse of components across different solutions.
- Improved support for international standards and interfaces.



OpenTele 3





Sandbox

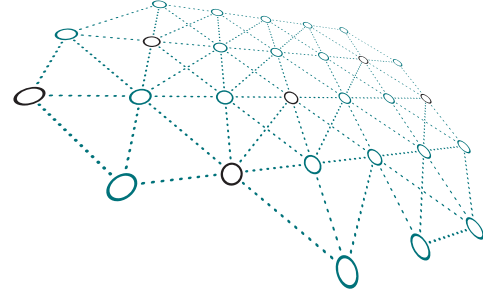
The term *sandbox* is used for things 4S provides to “play” with telemedical components. This includes example implementations of components, which assists in handling the standards appointed in the Danish reference architectures, virtual machines which makes it easier to tag into a telemedical infrastructure, and an infrastructure for handling projects.

The work extends a range of earlier projects and is currently funded partly by the TeleCareNord [<http://www.rm.dk/Sundhed/Til-sundhedsfaglige-og-samarbejdspartnere/TeleCare-Nord>] project and partly by the Telemed.nu [<http://www.telemed.nu/dk/sider/default.aspx>] project.

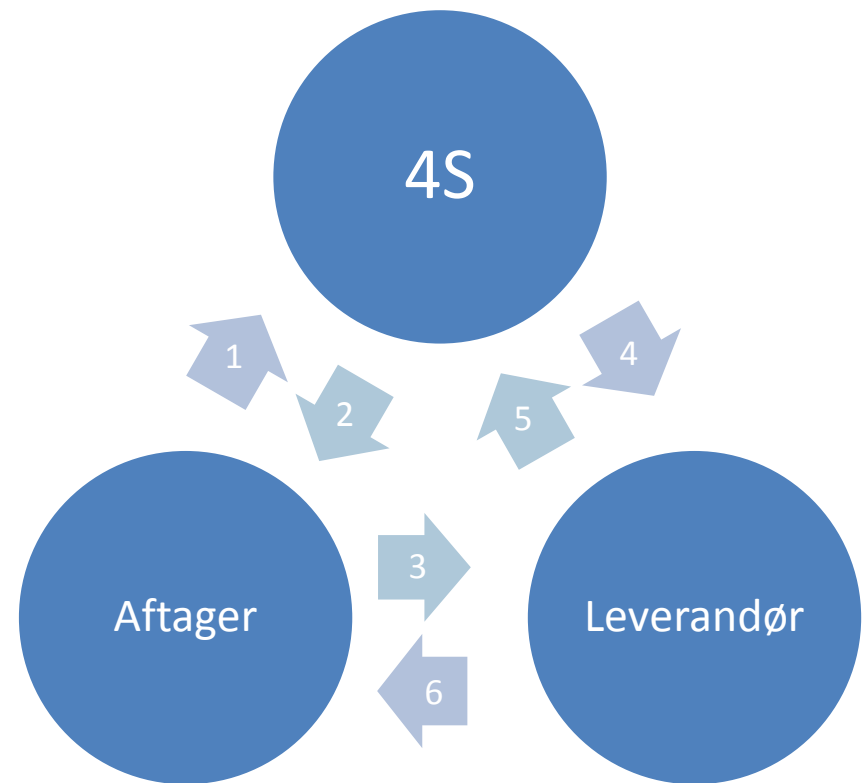
- Net4Care, implementation of different aspects of the reference architecture.
- 4SDC, a module for interacting with measurement devices.
- OpenXDS VM, an installation of an open source implementation of XDS.
- OpenTele VM, an installation of an open source implementation of a telemedical platform.
- Questionnaire editor, an editor for QFDD documents.



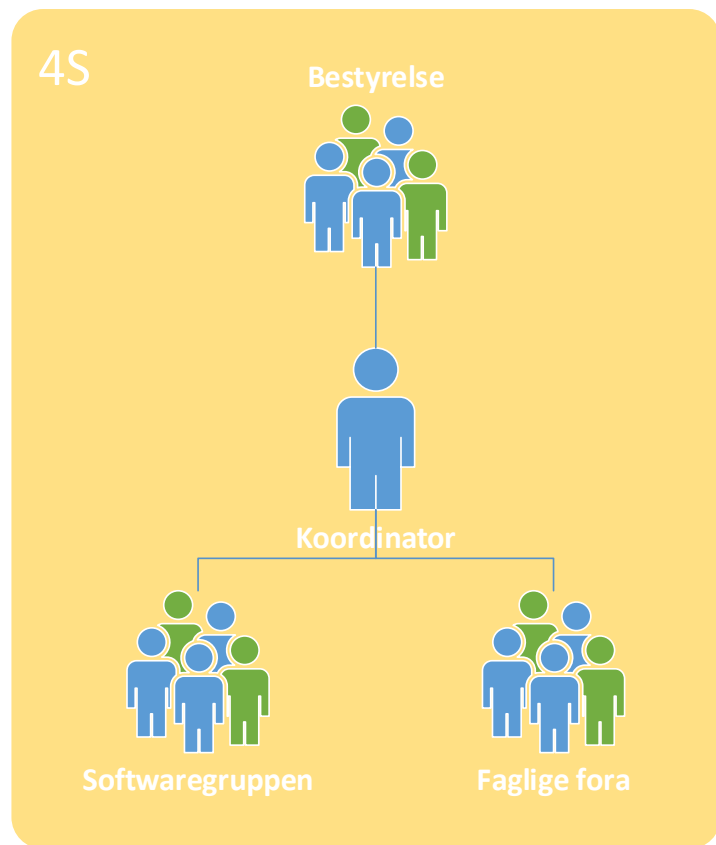
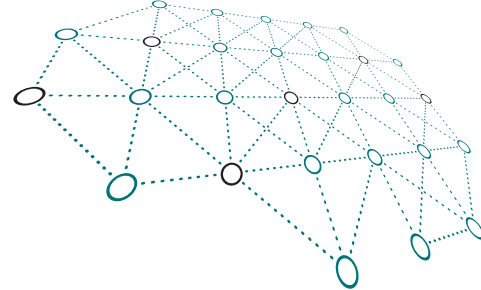
Hvordan – i princippet



1. "Aftager" kontakter 4S
2. Aftager får instruktioner af 4S
3. Aftager indgår aftale med leverandør
4. Leverandør henter open source pakken hos 4S
5. Leverandør leverer opdatering tilbage til 4S
6. Leverandør leverer løsning til aftager



Organisation - under revision



REGION NORDJYLLAND



Region
Hovedstaden



NATIONAL
SUNDHEDS-IT
NATIONAL BOARD OF E-HEALTH

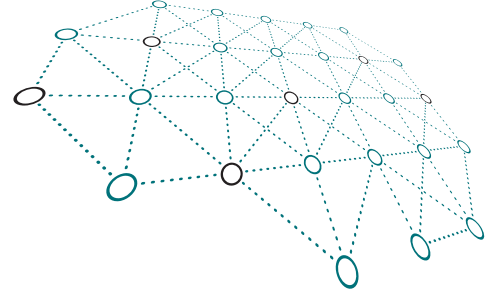


KØBENHAVNS KOMMUNE



STIFTELSEN FOR SOFTWAREBASEREDE SUNDHEDSSERVICES

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