



Claus Råe

Nationality: Danish

Languages: Danish (First language), English (Fluent)

Profile

Claus is an experienced Senior Architect with solid practice in enterprise architecture, solution architecture, IT strategy, IT governance, and leadership/people management. He is committed to provide business value through IT and always strives to improve business capabilities through existing or optimized it services. He has worked for several large and medium size private and public companies. Previous experience includes a long period of software R&D management responsibilities working with or within global software vendor companies focusing on Enterprise Resource Management systems.

He has a great passion for Enterprise Architecture, and he holds a Carnegie Mellon University Enterprise Architect Certification along with a TOGAF 9.1 and TOGAF 8 certification. He has done several presentations at IT University in Copenhagen, for example at the ITU Enterprise Architecture Summer school 2014 and is an avid user and trainer in ArchiMate.

Core competencies:

- Management and leadership
- Enterprise Architecture
- Solution Architecture
- IT strategy
- IT governance
- SW Development technologies and methodologies
- TOGAF
- ArchiMate

Please note that the "grey" colored entries in the following Job & assignment list relates to customer assignments that I have had as a partner in BaseLines, which I ended October 2020. I now Principal Consultant in Raae-Consult ApS.



Jobs and assignments

2022-Now	Client: Role: Projects:	DSB Chief Enterprise Architect – Strategy Part of the program “Fremtdens tog” being the team lead for a group of architects responsible for setting the strategy direction in regard to how to leverage IT in the future. Covering both the equipment (the trains) as well as the supportive backend IT solutions.
2020-2022	Client: Role: Projects:	Tryg Senior Enterprise Architect Engaged in multiple tender processes for instance related to a new Contract Lifecycle Management System and a Commission and Bonus calculation system among others. Strategy development: An IoT adoption strategy for Tryg and a Mobile Application Strategy to govern and align IoT and Mobile Apps on a corporate level Responsible for adaptation of the ACORD information and capability model within the EA group and in the integration team. High level solution/integration architecture and architecture assessments covering multiple services and products CO-admin and meta model responsible for the Tryg EA repository
2020-2020	Client: Role: Project:	PFA ArchiMate Expert Provided a basic ArchiMate training course for all PFA architects and associated managers, covering the complete ArchiMate standard along with modelling best practices and guidelines.
2020-2020	Client: Role: Project:	Pandora Global Office Lead Solution/Enterprise Architect Loyalty program – I have assisted as a solution and enterprise architect the in initial phase which has included assessment of existing COTS products against the Pandora architecture principles and generic requirements – the project had a primary focus on the US market, but the COVID-19 pandemic has impacted the project scope and pace.
2019-2020	Client: Role: Project:	Pandora Global Office Lead Solution/Enterprise Architect China POS – Implementation of a COTS Point of Sales system for all main-land China Pandora stores. I have been responsible for defining the high-level solution architecture for this new POS system in China. Covering all domestic as well as corporate integrations to IT-systems that either provides data to the POS system or consume data from the POS system. The entire solution architecture has been captured in



iServer Pandoras new Enterprise and Solution architecture tool That I have been the first one to utilized and adapt to the required architecture documentation best practices and obligations.

2019-2020	Client:	Pandora Global Office
	Role:	Lead Solution/Enterprise Architect
	Project:	Responsible for defining the solution and integration architecture for a new global Workforce Scheduling System. The integration and solution architecture are based on a region implementation structure with three major regions/tenants AMER, APAC and EMEA. The integration landscape is rather complex for instance having to integrate domestic payroll systems and receiving and providing data to and from a Master Data Hub (MDB) and a corporate Enterprise Data Warehouse (EDW) instance. Further utilizing AD and IAM for authentication and authorization and further providing the base architecture for a componentized and API centric architecture initiative with Swagger and OpenAPI as the core documentation technologies.
2019 -2020	Client:	Forsvaret / Danish Defense (DD)
	Role:	Enterprise Architecture Advisor
	Project:	Responsible for guiding DD how to orchestrate and build an EA repository – encompassing activities and goals like developing an EA (ArchiMate) modelling style guide, defining a governance model for usage and QA of EA models. Guiding and recommending DD how to document current and future architecture, identifying gaps and roadmaps for fulfilling gaps and strategy goals – at all architecture levels (Business, Application and Infrastructure). In addition, documenting how the current landscape looks like seen from an integration perspective with an Application and Data Centric approach
2018 - 2020	Client:	BaseLines
	Role:	Lead Solution Architect and Developing Manager for building and developing a GDPR centric Web and RPA based solution for small and midsize companies ensuring efficient and effective compliance to the GDPR regulation
2018 - 2019	Client:	COOP
	Role:	Trusted GDPR advisor and EA architect
	Project:	Part of the GDPR program responsible for documenting/adding GDPR centric Business Process and Application Component related information in COOP's EA tool QualiWare using advanced programming and scripting features within the tool, further acting as a mentor for COOP FTE's in matters of using advanced QualiWare scripting features.
2017-2018	Client:	BankInvest
	Role:	Architect and technical lead
	Project:	Technical lead and Enterprise Architect responsible for documenting the AS-IS architecture of BankInvest with specific focus on GDPR centric business processes, applications and data objects. The documentation is done using the ArchiMate 3.0 standard language ensuring a top to bottom documentation of the business and



application layers within ArchiMate. The project is based on the ISO 27000 standard and has deliverables and products that ensures compliance with the GDPR regulatory.

2017 - 2017 **Client:** **Copenhagen Business School**
Role: Trusted Advisor
Project: Trusted advisor in matters of implementation of EA best practices with specific focus on the ArchiMate modelling language and mapping the AS-IS IT-landscape and the current usage of IT for the core capabilities and essential business processes.

2016 - 2017 **Client:** **Maersk Line**
Role: Lead Enterprise Architect
Project: Responsible for driving an EA initiative based on ArchiMate 3.0 and BiZZdesign Enterprise Studio as EA modelling tool. Modelling the current IT-landscape (AS-IS Architecture) of Maersk Line Operations. Further, Claus has been responsible for creating modelling patterns and for writing a common “Modelling Guideline” and the related governance structure. Ensuring that contributions were compliant with the guideline and with the ArchiMate 3.0 language specification.

In addition, as a product specialist Claus has been involved in all modelling initiatives in Maersk Line DK, which could benefit from BiZZdesign Enterprise Studio such as the ELDM (Entity Logical Data Model). Finally, he has as the lead EA architect acted as the primary contact to the EA Architecture/modelling team in UK.

Involved in architecture related discussions defining principles and governance for how Maersk Line could/should architect their business, application and infrastructure development in the years to come.

2016-2016 **Client:** **AP Pension**
Role: Solutions Architect
Project: Solutions Architect at “Mit AP” based on Microsoft technologies - designing their future portal strategy from a technical/architectural perspective. Further, he participated in the development of the first mobile application for AP Pension; integrating backend application services to support a JSON based mobile consumer. Claus was responsible for QA and for the definition services bridging the gap between business and IT.

2011 - 2016 **Client:** **Danmarks Nationalbank**
Role: Head of Architecture and IT-Security
Project: The department is responsible for laying out the roadmap and transition plan realizing the TO-BE Architecture for IT in Danmarks Nationalbank. That implies defining principles and giving architecture guidance to internal and external stakeholders. IT security and risk management have a lot of attention and focus. They are in majority based on the Microsoft technology stack but are as a department providing guidance beyond the Microsoft product line.

Selected projects:



- Layout the architectural and nonfunctional requirements for a national credit register
- Layout architecture principles and patterns including IT security for IT development focusing on premise hosted systems based on Microsoft technology
- Definition of the strategy and vision in the respect to and usage of an Enterprise Service Bus ESB.
- Definition of the solution architecture for a News publishing system –highly sensitive information
- Defining Reference Architectures
- Participate in IT-strategy definition work effort
- Layout the requirements for an EA tool based on The Open Group ArchiMate language
- Layout of the overall design principles for a business-critical business intelligence / data warehouse solution
- International coordination and collaboration with other central banks –work done in ECB Frankfurt
- Participate in EU tender for RTGS system –COTS product
- Doing a platform analysis for the infrastructure design of a dedicated an isolated platform for Danmarks Nationalbank at BEC
- Participate in EU tender for new web site
- Agile development

2011 - 2013	Client:	Danmarks Nationalbank
	Role:	Chief Architect/Lead Architect
	Project:	As a development manager and lead architect, Claus was responsible for an application/software development team building tailor-made solutions for the different business units. All major software projects where based on the Microsoft technology stack. <u>Selected projects:</u> <ul style="list-style-type: none">• Technical project manager (PRINCE2 and SCRUM based) – Building an extranet with NEMID and SMS authentication• Solution architecture for a claim-based Extranet founded on a SharePoint 2010 infrastructure• Design and implementation of an Enterprise Compliance platform monitoring and collecting information with special compliance focus such as users and authorizations and behavior in a heterogeneous hosting environment. Microsoft .NET C# technology.• Architectural guidance of a new suit of products targeting a statistical data collection system.
2008 - 2011	Client:	Danmarks Nationalbank
	Role:	IT Architect
	Project:	Development of architecture policies and principles Architecture with business needs in a portfolio perspective. Working with various architecture frameworks such as EA3, TOGAF and OIO.



Selected projects:

- Layout a roadmap for usage of the Microsoft technology stack – with a special focus on Microsoft platforms
- Performing an analysis and a project mandate for IAM
- Performing an analysis and a project mandate for an internal Certificate infrastructure

2007 - 2008 Client: **Interactive Sports Games**
Role: Application Software Development Manager
Project: Co-responsible for software design and development of GUI solutions targeting our TrackMan radar system

Selected projects:

Clean up – refactoring solutions
Writing a code guide for all manage code projects

2001 - 2007 Client: **Microsoft**
Role: Program Manager and Developer
Project: Microsoft being a Software Development Engineer (SDE), SDE Lead and Software Development Engineer Test Lead SDET-Lead and Program Manager

Selected projects:

- Designing and building partner productivity tools –supporting the implementation methodology –Primary focus intelligent implementation and upgrade tools.
- SQUAD team –fixing issues/challenges for customers were partners have given up providing a solution
- Lead developer in supply chain functionality targeting Sales and purchase orders
- Innovation lead developer in Microsoft Project Green, building a service orientated ERP system –closed for strategic reasons
- Innovation Business architect – Build the NEXT generation of Navision ERP systems – project closed after Microsoft Acquisition

1995 - 2000 Client: **Lyngsø Information Industry A/S**
Role: Development Manager
Project: Responsible for a development team, developing software solutions targeting companies with specific focus on preventive maintenance based on the COTS product MAXIMO

Selected projects:

- Designing and building integrated solutions for Danish Defence – Advanced booking system, Cleaning system, Key security management system for Maximo built in 4GL language SQLWindows (Gupta Technologies)
- Product specialist and lead developer in a Maximo implementation for Banestyrelsen
- Bi-directional data exchange system in a distributed environment
- Build a development team of four software engineers



1992 - 1995

Client: **L-R Software A/S**

Role: Software Development Engineer

Project: Development of solutions for the Danish Financial industry. Claus was also the lead developer in the COTS product FormMaker, a form design and management system.

Selected projects:

- Designing and building the COTS product FormMaker a product for layout standard forms to printers in a WYSIWYG overlay design philosophy
- Check clearing system for Unibank
- Calculator for Villadsens Tagpap, making Entrepreneurs and Architects capable of calculating expected expenses in matters of roof construction
- Build a management system for a MATRA 65XX PBX system C++ coding



Courses and certifications

2017	SAFe 4 Certified Agilist
2015	Carnegie Mellon university certified enterprise architect
2013	TOGAF 8 Architecting the Enterprise License 29616
2012	ITIL Westergaard A/S License DF122298
2010	TOGAF 9.1 Architecting the Enterprise License 28045
2009	PRINCE2 FOUNDATION EPM Group License 02261315-01-QQ13
2004	BASICS OF SUPPLY CHAIN MANAGEMENT EXAMINATION APICS – San Diego Chapter Board of Directors

Education

2015	ITU UNIVERSITY OF COPENHAGEN Master Course in Enterprise Architecture Grade: A (12 in the Danish point scale)
2013	FINANSSEKTORENS UDDANNELSESCENTER (FU) Master education (Master I Ledelse) MiL Grade: A (12 in the Danish point scale)
2006	IT UNIVERSITY OF COPENHAGEN (FU) (SEP 2005- JAN 2006) Master Course – IT and learning didactic Grade: B (10 in the old 13 point scale)
1991	COPENHAGEN BUSINESS COLLEGE Datamatiker - Computer Science, Bachelor level Grade: A (11 in the old 13 point scale)