Chapter 15 Design and Standardisation of Core Directories for e-Government

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ABSTRACT

Core Directories are content infrastructure elements for interoperable use in service oriented architectures. They capsulate basic information to a generic structure offering easy access and transparency. The design and research activities focused on specification, a generic approach, globally unique identification of objects and development of an example application. Moreover, requirements and advantages of the concept were discussed and directed to information management issues. Key objective is the modernisation of the information technology used in and between administrations. The interdisciplinary approach is a challenge for the constitution of next generation e-Government networks. The chapter describes the strategic and operative standardisation activities, the concept of Core Directories and the example application service responsibility finder. Furthermore, an outlook for some research activities and projects on this topic is given.

INTRODUCTION

Finding the right authority for a specific public service is a challenge for citizens and business. Service orientation and usability turn out to be important requirements for administrations. Moreover, the collaboration of administrations increases and becomes more and more complex. Controlling, management, cost pressure and professional customers are arising the need for efficiency to challenge the requirements of the

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21st century. Administration is confronted with new financial, organisational and strategic objects.

The presented research activities are based on ideas for One Stop Government and portals as one option to handle the communication. Therefore, modernisation and adjustments to the actual structures are addressed by several initiatives and projects like the European Services Directive (European Parliament and the Council, 2006, pp. 0036-0068) and the German public administration service phone number D115 (German Federal Ministry of the Interior, 2009). Public institutions are confronted with various changes in electronic government. Single point of contacts supporting the whole life cycle of communication from business to administration and networks for data exchange of interoperable processes are essential realisation parts. (Von Lucke & Eckert & Breitenstrom 2008, pp. 29ff, pp.38ff) Information and knowledge management are basements for the next generation interaction and electronic services. Basic information is: offered public services, available electronic services, authorities, institutions, contact persons and responsibilities. Responsibilities are important for an efficient, seamless and legal compliant organisation especially in federal and large structures. Therefore, the research group focused on the further development of existing responsibility finders and the design of Core Directories as infrastructure components in service oriented architectures.

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The goal of this chapter is to provide a common understanding of the concept of Core Directories. It explains the advantages and shows the chal-

lenges of this concept. It also describes the latest research results and future topics.

The chapter shows the idea of Core Directories including a generic approach and identification scheme. German standardisation activities and the context are explained in the first part of the chapter. Especially chances and problems related to the standardisation activities are presented. The document addresses the standardisation activities, as the common specification is a key for realisation of data exchange in the heterogeneous architectures. Cross border and interdisciplinary processes need well defined interfaces and formats. The second part of the chapter illustrates the concept of Core Directories. It offers an interdisciplinary use of basic information in different contexts. Moreover, the described requirements lead to increased quality of information and distributed work load. The third part of the chapter shows the practical realisation of the specification with the proof-of-concept through a directory based responsibility finder and a possible network of such services. The responsible finder is a key part for the organisation and communication of public administrations. The document ends with an overview to further research activities and projects.

CORE DIRECTORIES FOR E-GOVERNMENT

Interoperability Challenges for e-Government

Working together is the key objective for interoperability and also for standardisation processes. But the combination seems to be a difficult challenge. The heterogeneity of the IT-Systems, organisational structures, stakeholders and processes increases the relations enormously. A common international technology infrastructure becomes actually nearly impossible. Thus, interoperability focuses on specific topics and projects on selected levels. Defining a complex architecture needs cap-

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