Next-Generation IT Architecture for Telecommunication Companies – a Factory based Approach

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Abstract: The IT landscape of telecommunications companies is far more dynamic than IT landscapes in most other application domains. The main reason for this is the fast development of new technologies that form the basis of new telecommunications products. These products very often require new or adapted technological devices as well as IT processes for production, operation and assurance of new or existing products. The factory based approach presented in this paper tackles this problem by separating those parts of a process in production, operation or assurance affected by specific technologies from other processes. In the factory based approach all processes affected by a technology are bundled in a factory and all factories have a common interface that enables relatively effortless replacement of one factory by another factory that supplies equivalent services.