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Foreign Media Collaboration Framework: A Service-oriented Architecture for Linguistic Translation and Processing

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Automated linguistic translation and processing are playing an increasingly critical role in both the public and the private sectors, filling in where human translation or transcription is impractical, inefficient, or cost-prohibitive. Users need a service-oriented solution that integrates a family of complementary products and technologies to provide machine translation of speech, text, and media broadcasts in a scalable, highly adaptive architecture supporting and supplementing available linguists, as well as enabling nonlinguists to work and collaborate at productive levels. To address that need, Northrop Grumman Information Systems is developing the Foreign Media Collaboration Framework (FMCF), a service-oriented architecture that integrates and manages the application of the foreign-language translation capabilities of the best machine translation, optical character recognition, and automatic speech recognition software available today. As a service-oriented capability, the FMCF can satisfy user needs by offering intrinsic interoperability, increased federation and vendor diversification, better alignment with business and technology domains, greater return on investment, and improved organizational agility. This article provides an in-depth exposition of FMCF concepts and methodologies, as well as a much needed knowledge base for foreign media collaboration problem solving.



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