Integrating Local, Regional, National and International Grids

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The growth of multipurpose grids presents a unique challenge for those who need to support the corresponding infrastructure in a uniform manner across all of these scales. Problems ranging from detailed software interoperability up to general design philosophy conflicts must be addressed and resolved to create a working infrastructure that will create a productive environment and not be overly restrictive or unduly confusing to the user. Training and support need to span the feature set of the integrated grids while specifying clearly the domain of the features of each of the supported components. Finally, the feature set needs to grow to encompass the addition of new domains and capabilities that are added within disciplines. In this talk, I describe the middleware support and discipline-specific features of the Texas Internet Grid for Research and Education (TIGRE), an integrative grid that spans local, regional, national and international-scale usage, and its associated partners.