# Extending the useR community: developing Shiny applications and interactive graphics

**(within an enterprise framework)**

**Marie Vendettuoli**

USDA APHIS Center for Veterinary Biologics
marie.c.vendettuoli@aphis.usda.gov

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A common challenge when using *R* in an enterprise environment is one of *accessibility*, for both the developer and their clients. Clients requesting analysis may not have the resources to write or run *R* code or scripts. It may be beyond the limits of local IT resources to deploy, maintain, and troubleshoot *R* on more than a handful of computers, and even then only at the most superficial level. The packages **shiny**, **ggvis**, and **gridSVG** attempt to address the first issue by providing a rapid approach to creating custom web interfaces for the *R* functions of interest and embedding interactive, data-driven, graphics. However, deploying **shiny** applications over the web may still be beyond a developer's access due to privacy, IT or budgetary constraints.

We present a case study at USDA APHIS that makes use of virtual desktops to deploy **shiny** applications with minimal resource demands on both IT and individual developers. We present usage statistics from a pilot application that demonstrates measurable value-added impact for both client and developer and allows more users to interact with *R*. We describe strategies for scaling for multiple users, responding to changes in developmental packages and tracking usage. We highlight the importance of studies for enhancing the user experience.