A Cloud-based extension to the SMART suite of tools for enhancing protected area management

SMART partners

The SMART Partnership is a group of global conservation agencies, conservation organizations, and individuals that share a mission to conserve biodiversity, reduce the impacts of illegal extraction and trade of natural resources, strengthen law enforcement related to biodiversity conservation, and strengthen overall management of conservation areas.

smartconservationtools.org

SMART values

- Freely available and open source
- Responds to needs and feedback from front-line users
- Scalable and customizable to a wide variety of locations and contexts
- Packaged with an extensive support and training network
- Commitment to long-term funding and support through the SMART Partnership

What do I need to use SMART Connect?

SMART Connect is an extension to your existing SMART installation.

- Basic but reliable internet connectivity, with speed of approximately 1 Mbps up and down
- Can be hosted in the Cloud for as little as $200 per month or run from a single, secure and reliable connected server
- IT and information security expertise required to set-up server, troubleshoot, back up and recover data and manage networks
- SMART Connect requires that basic SMART software is installed and configured for your site(s) (see a Guide to Getting Started with SMART for more)

When you are ready to move forward with SMART Connect, contact your SMART Partner or info@smartconservationtools.org.
Protected areas are at the conservation frontline of efforts to protect species and habitats from poaching and other threats. To respond effectively, protected area staff need information on where threats are occurring and the capacity to address them quickly. Often, these solutions need to be implemented in remote places, with limited staffing and resources. SMART was developed to respond to these fundamental needs.

SMART Connect—the next generation of SMART tools

With SMART now up and running in more than 200 protected areas worldwide we began receiving a new wave of demands from the field to ramp up SMART implementation. Specifically we were asked to improve the speed of data transfer and enable real-time response. We were also asked for better integration of SMART data with other commonly used sensors, applications and web-services, and for better access to sharing of SMART products such as maps and reports. We listened to these requests. And we are now introducing SMART Connect.

SMART Connect is an add-on online operating environment for SMART. It leverages real-time connectivity to greatly enhance speed of data transfer from the field, sharing of SMART data, maps and reports at national level, and the possibility of integration with a wide variety of other mapping, analytical and data collection platforms. It has the power to transform your use of SMART from a tactical tool to a full-blown operational response platform for protected area management.

What is SMART?

The SMART (Spatial Monitoring and Reporting Tool) Approach combines a cutting edge protected area management tool with capacity building and a set of best practices. The SMART software makes it possible to collect, store, communicate and analyze ranger-collected data on illegal activities, wildlife, patrol routes, and management actions to understand where efforts should focus, and evaluate ranger performance. It comes with a mobile data collection app combined with a powerful analysis and mapping interface designed for, and customizable by, local users.

How can SMART Connect help?

Collect and share field data in real time; manage and respond to real time alerts to enable more effective and rapid operational responses

- Real-time data transfer to ‘connect’ rangers in the field to central command centers.
- Move beyond analysis of where threats HAVE happened and include responding to where threats ARE happening
- Enable analysis of SMART data as soon as it is collected

Centrally manage SMART deployments at multiple sites

- Sync data across entire protected area networks
- Access and synthesize up-to-date information at national level
- Enable non-SMART users to visualize and evaluate SMART reports
- Encrypt and securely share sensitive data
- Manage, develop and share data models, reports, queries across an entire protected area system

Enhance analysis, visualization and impact of SMART data for decision making by integrating with other systems

SMART Connect provides an open suite of interfaces to allow the integration of a range sensors and systems such as:

- Bringing data from sensors (e.g., remote cameras, UAVs, patrol and wildlife tracking devices) into SMART
- Bringing in data from web platforms (e.g., deforestation, fire alerts) to provide managers a more comprehensive understanding of the status, threats, and management needs of their site
- Supporting additional mobile data collection tools (UHF/VHF digital radios)
- Feeding SMART data into other systems for analysis, such as I2 or ARCgis

Huge potential exists in the future to expand this work and we welcome the opportunity to collaborate with partners and stakeholders on these developments.