

Integrating Activities for Advanced Communities



D3.15 – User manual and software documentation for INTERACT Station GIS system

Project No.730938– INTERACT

H2020-INFRAIA-2016-2017/H2020-INFRAIA-2016-1

Start date of project: 2016/10/01

Duration: 48 months

Due date of deliverable: 2019/03/31

Actual Submission date: 2019/03/28

Lead partner for deliverable: SLU

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Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the Consortium (including the Commission Services)	
CO	Confidential, only for members of the Consortium (including the Commission Services)	

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Publishable Executive Summary

This document provides information that will enable potential users of INTERACT GIS to enter the system at the various user-levels that are supported. Once the users have entered INTERACT GIS, it is quite self-explanatory provided that they invest in taking the personal time required to learn the depths of the system. This document will be disseminated via INTERACT GIS, and may be found under its menu “Instructions” together with an *interactive on-line tutorial*. In combination with the “INTERACT GIS declaration regarding the processing of personal data”, which also may be found on-board the system, these documents constitute a manual for how to enter, use, and understand INTERACT GIS.

Contact information regarding general support in the process of entering and using INTERACT GIS is provided within the system itself.

Introduction

Dear potential users of INTERACT GIS,

After having put considerable resources and efforts into developing INTERACT GIS, the system is now available for your usage at www.interact-gis.org. INTERACT GIS has been developed into a rather deep set of functionalities that are available at a number of different levels of privilege, ranging from free public usage, through levels of administrating field stations, visiting scholars, and activities performed at field stations, to the top level of administrating INTERACT GIS itself. As part of the development effort, the operative platform has been changed into the latest available technology, facilitating INTERACT GIS to operate in accordance with EU's General Data Protection Regulation (GDPR) safety standards at a very effective level of costs.

Once you have entered INTERACT GIS, it is quite self-explanatory if you only invest in taking the personal time required to learn the depths of the system. In order to enter INTERACT GIS, and to boost your understanding of what you are facing, you need to know the following: INTERACT GIS is now hosting the digital version of the INTERACT Station Catalogue, which already has been fed into the system. In addition, the Station Catalogue will be supplemented with information regarding the monitoring activities that are being performed as part of regular station activities. One new thing with INTERACT GIS (as compared with earlier versions) is that all the information mentioned above is available for edition by the stations themselves. In fact, all user field-stations are encouraged to build and maintain their respective station-records as part of their everyday work.

Connecting your station with INTERACT GIS

To start using INTERACT GIS, you need to pass three consecutive steps in order to safely acquire the fundamental system privilege of representing a station (all concepts will be explained further down the document):

1. First you simply need to visit www.interact-gis.org as a public user, and assign for an account using the *Sign-up menu* available at the upper-right corner of the user interface.
2. Thereafter you need to apply for station privileges with an "official" email to interact-gis@slu.se, wherein you prove who you are and what station you are representing.
3. Finally, you digitally sign a GDPR Data Processing Agreement with the Swedish University of Agricultural Sciences SLU who is the legal "processor partner" of your station.

As a fully connected station, you will be able to share catalogue information with any public user. The public user will be presented with a rich array of filtering functionalities that enables an interactive search for stations that fulfil multiple criteria relevant to Arctic research and monitoring activities. And if occasional users happen to visit INTERACT GIS, the system may be used for studies and/or for the sheer fun of enjoying the digital Station Catalogue. *At the "Catalogue level of usage", no personal information is processed and no operational costs are charged.*

Applying for visits at Arctic stations with INTERACT GIS

The INTERACT GIS *Sign-up menu* may also be used for assigning a PI-account to any public user, which will facilitate for PI's to apply for permission to visit and perform activities at field-stations (perhaps after having identified a suitable station based on catalogue information). *Receiving and administrating PI-applications require stations to enter "Active level of usage" in INTERACT GIS*, which may be easily switched on and off once the station is fully connected. If a station is switched off from active user-mode, it won't be visible for applicant PI's.

At the active level of usage, stations start to accumulate information regarding activities related to research, monitoring, conferencing, and educational activities, including personal information regarding visitors that is highly liable to GDPR. Hence, *in active usage, personal information is processed and operational costs are charged*.

In active usage, INTERACT GIS is designed to provide far-reaching support regarding the general administration of field-stations. Based on the information provided by the applications of PI's, anything from physical resources to publication databases may be planned ahead of the field-season, and the resulting database contents may be assessed for annual reports etc. Based on the experience of already having had former versions of INTERACT GIS in active service for a number of years, the cost-efficacy with which field-stations may be managed will most likely be boosted by the active usage of INTERACT GIS. *This economic gain is likely to significantly exceed the minor operational costs charged to active user stations*.

With active stations storing their administrative data in the shared INTERACT GIS database, a record encompassing all user stations is cumulating over time. In addition, most stations have already contributed to the database with historic activity records. Such a cumulated record has invaluable properties that range from providing data to future historians, to enabling *a collaboratively regulated monitoring effort across the Arctic*.

At the PI level of privilege, scholars accumulate a personal editable record of applications, activities, and collaborators across their respective networks of visited stations. In the new version of INTERACT GIS, a "project" may consist of any number of activities spread across any number of stations. The project is hence at focus, where former versions focused on "stations". Just like stations are encouraged to embrace the administrative functionalities available at the active level of usage, PI's are encouraged to include the maintenance of their respective INTERACT GIS records as part of everyday work.

With the bilateral correspondence between PI's and field-stations being semi-automated by INTERACT GIS, the system supports collaborative communication between stations and visitors already from the application phase, while maintaining a boosted level of administrative cost-efficacy.

Operative costs of INTERACT GIS

The operative costs of INTERACT GIS are currently around 1,800 Euros per year, which are evenly split across the stations that use the system in active mode. If thirty stations use INTERACT GIS in active mode, this would amount to 60 Euros per station and year. If, say, 60 stations would use the system actively, the annual fee would reduce to 30 Euros which is *approaching free usage*. In

other words, the annual fee per station *may be reduced by solidarity policies of the users themselves*.

The annual fee will be annually charged, starting exactly one year after stations have switched on Active mode. This will provide a *one-year test period* whereunder stations may switch off Active mode as they like. After the test period, stations must settle for their desired level of usage, and will be charged thereafter. The administration of operational costs will be delegated to the INTERACT GIS management board wherein active user stations will be represented together with system operators and system owners.

Processing of personal data in INTERACT GIS

A central aspect of INTERACT GIS involves collecting and storing personal data that falls within the framework of the European Parliament's General Data Protection Regulation, GDPR. Such collection and storage require a *controller*, which according to the GDPR is "the legal person that processes personal data within its business". As INTERACT GIS offers support to the field stations' own operations, each station that uses the system is therefore to be considered a *controller*.

In the event that the controller's organisation engages an external resource to process their personal data, this resource is called a "*processor*". In the case of INTERACT GIS, it is the Swedish University of Agricultural Science, SLU, that is responsible for the processing of personal data on behalf of the field stations until further notice. According to direct requirements of the GDPR, the relationship between a controller and processor must be regulated in a written Data Processing Agreement (DPA) wherein the processor's responsibilities are clarified:

- The processor assumes responsibility for ensuring an adequate level of security in terms of aspects such as technical and organisational security, data availability, authorisation, etc.
- The processor assumes responsibility for immediately notifying the controller of any breaches, incidents, or doubts regarding the application of the Personal Data Act.

In its role as processor, SLU delegates the responsibility for operation and service of INTERACT GIS to its *sub-processor* "ICT Services and System Development" at Umeå University Sweden, UmU ITS. This delegation must be regulated in a written Data Sub-processing Agreement.

As a result of the above GDPR requirements, *the INTERACT GIS DPA must be digitally signed by every individual field station that uses INTERACT GIS in active mode*. However, since stations have the free choice of switching active mode on and off, all stations that connect with INTERACT GIS must sign a DPA in case they wish to switch on to active mode. All digitally signed DPA's will be physically stored at SLU.

The INTERACT GIS DPA may be downloaded directly from INTERACT GIS, where it is found under the GDPR menu ("INTERACT GIS declaration regarding the processing of personal data"). The INTERACT GIS DPA also contains information regarding the structure and usage of INTERACT GIS that may add valuable information to the above instructions.

The longevity of INTERACT GIS

INTERACT GIS is designed for independent autonomy with respect to time-limited projects such as INTERACT and SITES. An important part of system development is the design of an autonomous management board where users, operators, developers, and intellectual owners cooperatively take full responsibility for the longevity of the system. Principally, INTERACT GIS is designed to operate towards a forever horizon.

SLU owns the intellectual properties of INTERACT GIS.

Contact information

- For issues concerning the connection of your station with INTERACT GIS, contact interact-gis@slu.se
- For issues concerning the signing-up as a PI user with INTERACT GIS, contact interact-gis@umu.se
- For issues concerning general system support, contact interact-gis@umu.se

We wish you all a pleasant experience with INTERACT GIS!

Tomas, Britta, and Anders
Uppsala and Umeå, Sweden,
in March 2019

