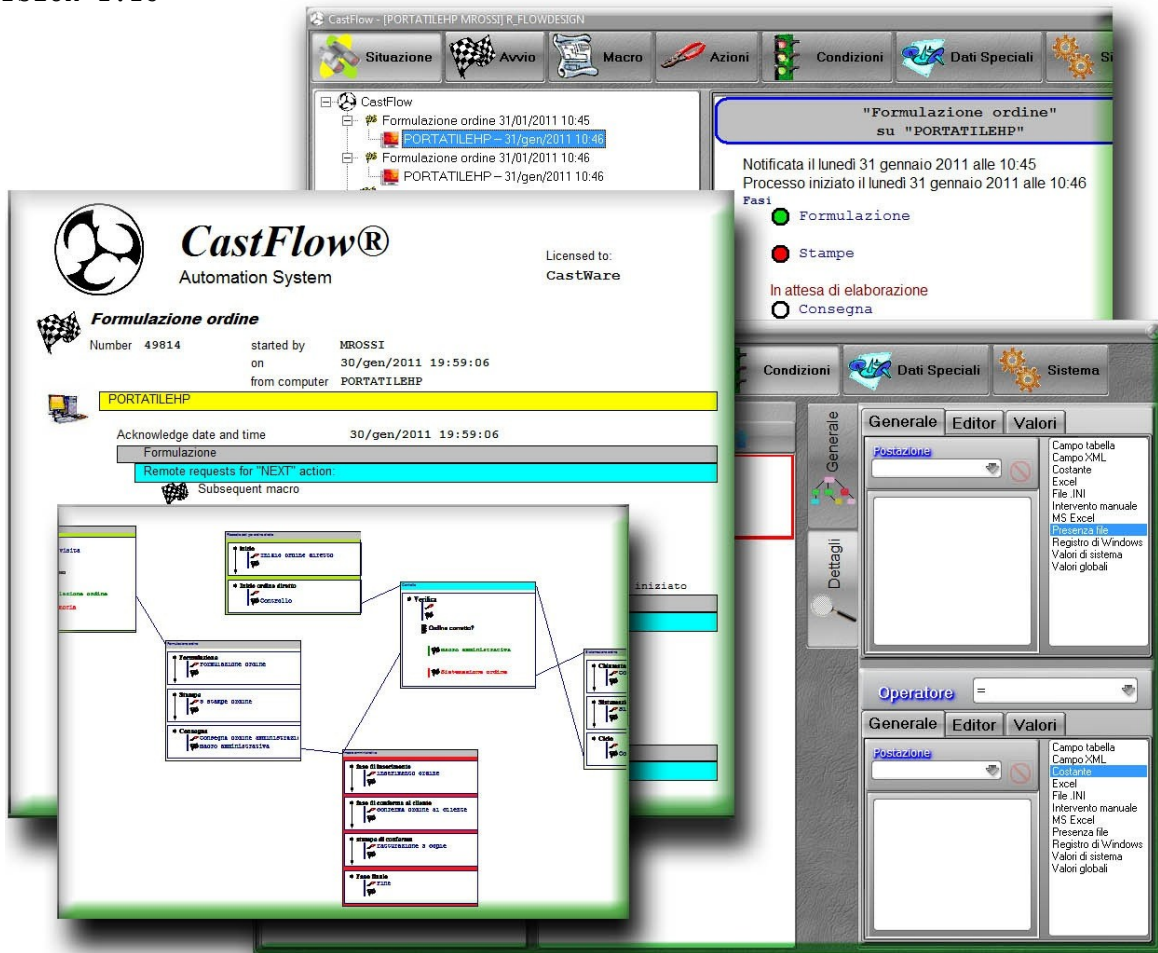


CastFlow Automation System

Version 1.15



What is it and what it does

It's a programming system: allows anyone to automate the administrative operations of a company, that usually consume staff's time to get completed.

Relieves the paperwork of who does it habitually. Deletes the base operating delays and ensures the lack of formal errors. It can take automatic decisions or

get them to the right people at the right time. It's the ideal tool for those who want to maintain over time a high quality and reliability.

Who will use it

All companies that have recurring administrative tasks and who are forced to divert valuable personnel from other tasks.

The company may be either a large, medium, small or staff. It is used with the mouse and you do not need to be a programmer because it is only to assemble logical "prefabricated" parts .

A real-world example



A vendor of the fictitious company "Acme Profumi" goes to a customer's site for a new supply contract.

The contract has to be put in the hands of administration in "Acme Profumi" for the burochratic iter to start. In order to do this, the vendor must return back *and therefore **some time passes by***.



First of all, the availability of all the requested stuff is to be checked in the warehouse: *another time* passes by for the internal communication between departments.

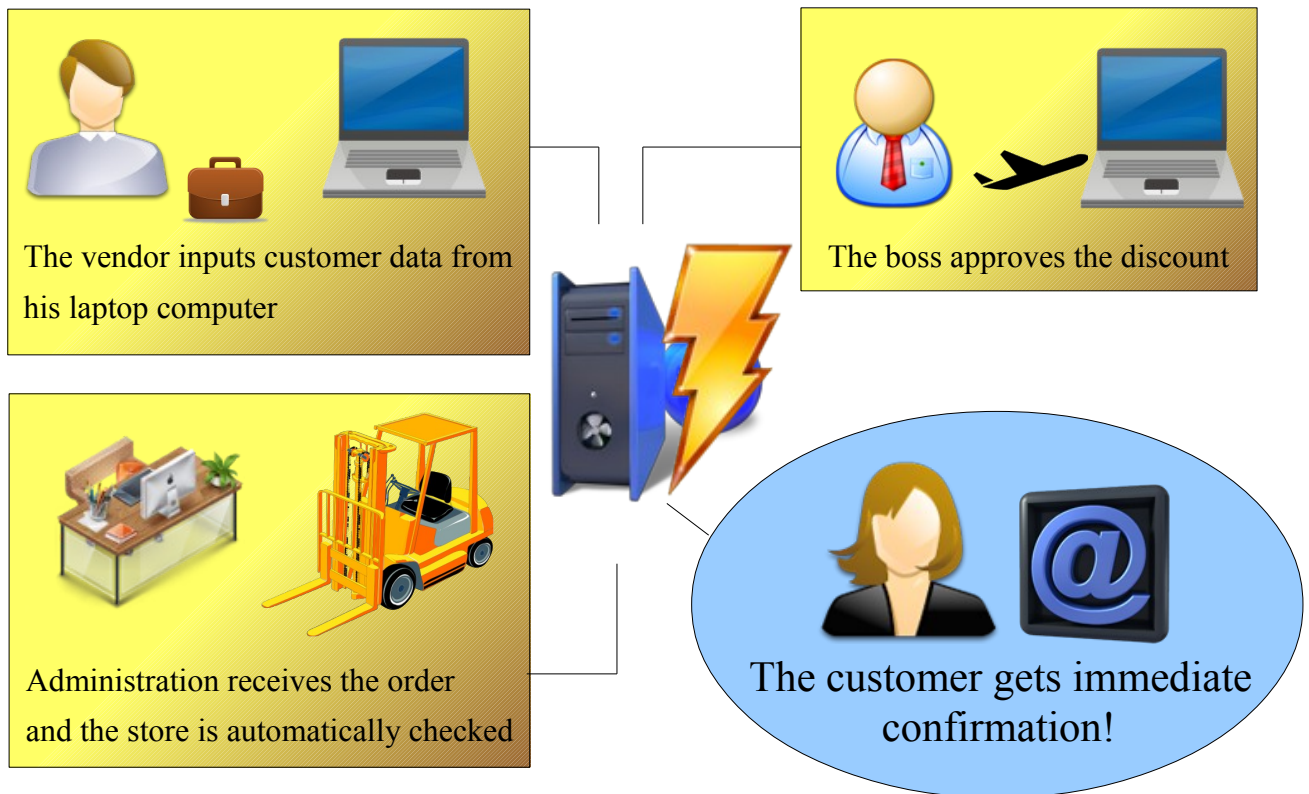


The vendor promised a "special discount" to the customer: it has to be approved by the boss. Unfortunately he is travelling now and no-one else can give this approval: just *another delay* during which the order doesn't proceed.

Only after *much time* the administration can give the customer confirmation and make the invoice.



CastFlow can automatically manage all the steps in a few moments, due to its sophisticated automation engine that involves the right persons at the right time, anywhere they are. The above example can turn into: the vendor places an order, the administrative office gets immediately informed, the boss will approve from his notebook, the burochratic iter is started, the warehouse gets automatically checked for availability and finally the customer receives his confirmation within minutes!

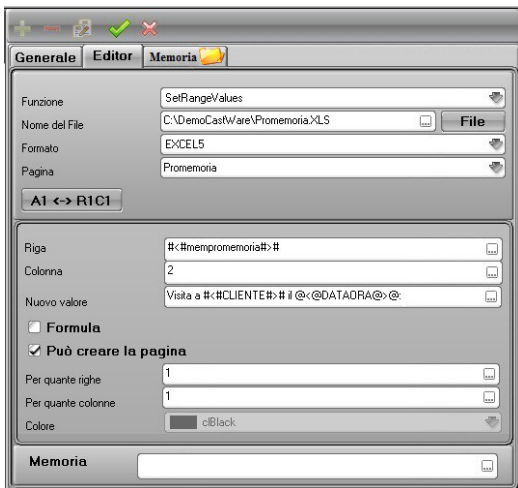


Introduction

Complete automation system for software applications. Support for multi-user and multi-language environments. Secured access. A simplified user interface allows to build complex logical flows, involving as many computers as needed, having different roles and wait states. Any computer can connect to the system in a secure and automated way. Computers may be anywhere, without geographical limits, providing they are networked together or have access to the Internet. The entire system can also be set-up on a single computer. Even older applications can interact with CastFlow, preserving their strategic role.

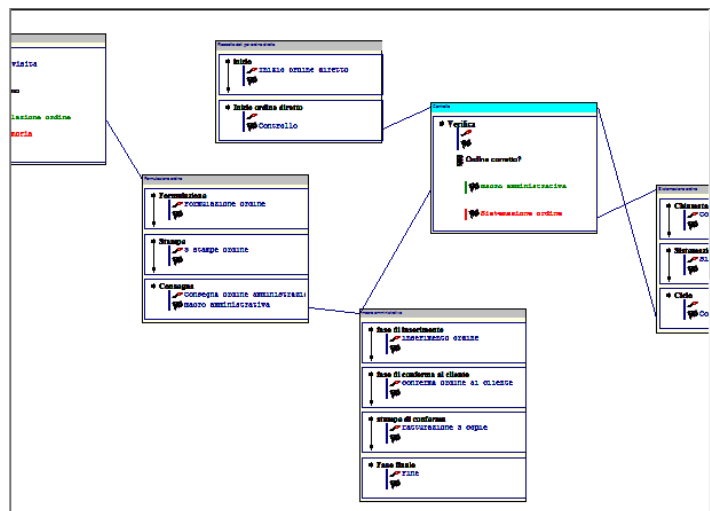
Installing the system is simple.

Main functionalities

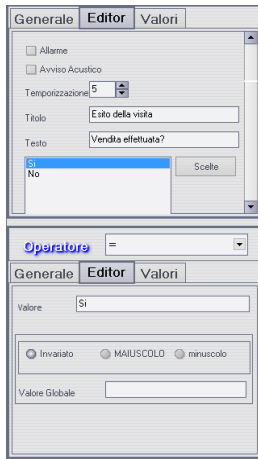


- ◆ Embedded functions for MS-Excel®, e-mail, FAX, file managing, XML handling, user interfaces, system registry and many other tools.
- ◆ Unlimited scenarios, called "Environments" for grouping application areas and versions.

- ◆ Unlimited application flows called "**Macros**". The system administrator can easily build as many macros as needed, without any number limitation, grouping them into functional areas for ease of usage.



- ◆ Unlimited steps for each macro. A macro is built up by "**Phases**" and can represent any grade of complexity.
- ◆ Unlimited actions. Each Phase is made up by **Actions** and **Conditions**. None of them is mandatory and they can be assembled together for achieving a goal, being an "Action" an elementary operation like writing some information into a file, showing a message on the screen or sending an email.



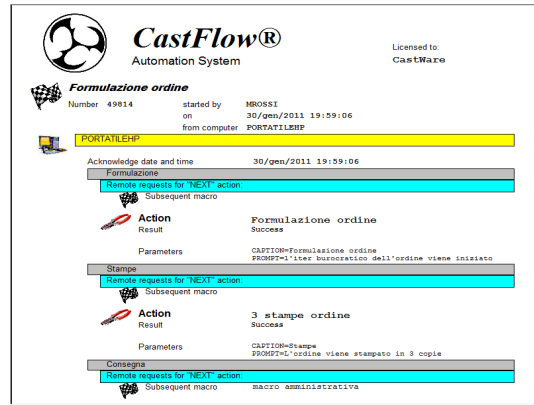
- ◆ **Unlimited conditions.** Conditions are automatic "questions" that the system uses to resolve how the logical flow must evolve. Each Phase can be resumed with the following sentence: "If the Condition is met, do the Action A, else do the B". Many Conditions may be joined together using logical operators. Sub-conditions can also be made. Each condition can be manual or automatic. Manual ones imply intervention by an operator (they typically are decisions and data entry). Automatic ones are able to retrieve all needed information without any user intervention. Conditions can compare information from different sources at a time: this is a **key feature** of CastFlow.

- ◆ **Remote conditions.** Every Condition may be evaluated by the same computer where the macro is being executed, as well as on a remote workstation. It means that a Macro executing on workstation A, can automatically initiate some processing on workstation B (maybe a geographically distant one) and wait for result for further processing.
- ◆ **Unlimited Special Data.** Any information can be turned into "Special Data", even those implying complicated processing. Special Data can be reused many times by both Actions and Conditions, dramatically simplifying flow design and maintenance. One important aspect about Special Data is their ability to be used during *Quality Check processing*, assuring that the result will always be consistent.
- ◆ **Following Macros.** Each Phase can initiate other Macros according to Condition results.
- ◆ **Shared Memory.** All cooperating workstations in a Macro will store data in a shared way.

```
C:\>caststarter.EXE| user:MROSSI password:p database:C:\CastWare\castwork.gdb
macroname:"Visita Commerciale al cliente" workstation:Server usergroup:Administrators
```

- ◆ Ability to launch Macros from **external programs** (earlier applications of different technology). Macros can also be initiated from command line, by external programs like Java applets, WEB sites or older administrative systems. This functionality matches the security criteria and enables full automation even from pre-existent systems.
- ◆ **Unlimited Workstations.** No limit on the quantity of workstations to be used. Computers are identified by their network names and homonymies can be easily solved this way: "Server London", "Server Sidney", "Server Tokyo").
- ◆ **Security.** Every access to the system is controlled by password. This prevents unauthorized accesses to the system that could cause serious security problems. The System Administrator can also set up additional complex access policies so that no other user can damage the system.
- ◆ **Fail-safe.** In case of failure, no information is lost due to the robust system architecture based on asynchronous transactions. As soon as the system goes up again, all previously running will restart automatically from the exact Phase they were into when the system failed.
- ◆ **Multi-thread.** Actions are always performed using the multi-thread technique, allowing multiple operations to be executed at the same time, without bottlenecks.

- ◆ Complete **history archives**. Each event of a logical flow is tracked down: who started a Macro, when, from which workstation, what other workstations were involved, how did they respond, how much time they required, etc. This archive becomes a documentation with which to reconstruct all behaviours and timings of flows.
- ◆ **Reports**. The Archive can be printed in full detail.



- ◆ Unlimited **software modules**. CastFlow has been designed for accepting new functionalities. It is an "engine" that can drive modules. Specific Actions and Conditions can fulfill any special need. External devices can also be used, like displays, thermal printers, barcode readers and more.
- ◆ The system is equipped with an advanced **graphical user interface** that allows easy management of every single aspect of the automation. A real-time Macro monitor is also included for running flows.

Available tools

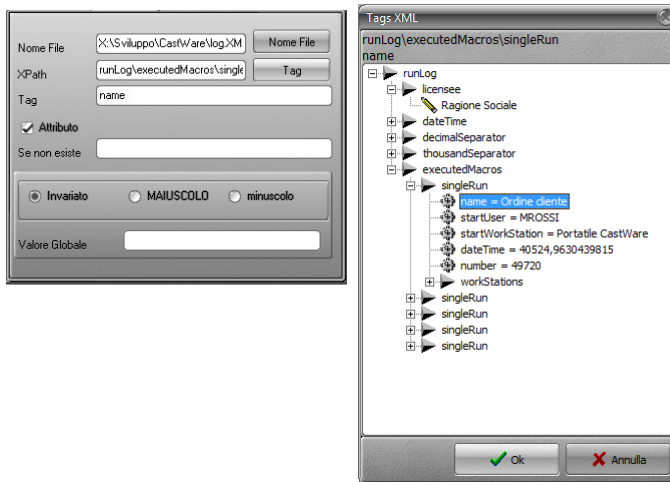
Available tools in this revision are many, suitable for general computer operations. They are listed here along with a brief description.

Actions

ExcelWriter	Writes data in an Excel® file without requiring it to be installed
FilerPlugin	Copy, move, delete and rename files
INIWriter	Writes data to a configuration file
ListScanner	Runs a tailored Macro for each element in a list
MSExcelWriter	Writes data to an Excel® file through the official Microsoft® program
MailerPlugin	Sends E-Mail messages through direct connection with mail server: no external programs needed
MultiPanel	Automatic grouping of Special Data into a single user screen for ease of usage. Allows to input multiple data within a single screen
PathGenerator	Creates a "tree" of folders based on a complex model
RegistryWriter	Writes data into the Windows® Registry
ShellExecute	Starts external programs with optional parameters
SilentLoader	Loads data into memory
UserInterfacePlugin	Shows a notification message on the screen
ByStander	Idle wait
XMLWriter	Writes data into an XML document

Conditions

XML field	Reads data from an XML document
Constant	Specifies a constant value that cannot be changed
Excel	Reads one or more cells of data from an Excel® file without requiring the Microsoft® program to be installed
.INI file	Reads data from a configuration file
Formula	Evaluates compound mathematical expressions
Manual input	Allows data input by a real person
MS Excel	Reads one or more cells of data from an Excel® file leveraging the Microsoft® program at full extent
File check	Checks whether a file or folder exists or not
Windows Registry	Reads data from the System Registry
System Values	Returns system-specific values such as current user name
Global Values	Reads back data from Shared Memory: key feature for automation



Every tool has its own special **user interface**. They can be combined with the Special Data for achieving the needed goals. Other tools are currently under development for extending the range of current features (eg. multimedia and text documents). Special tools will be developed on demand.

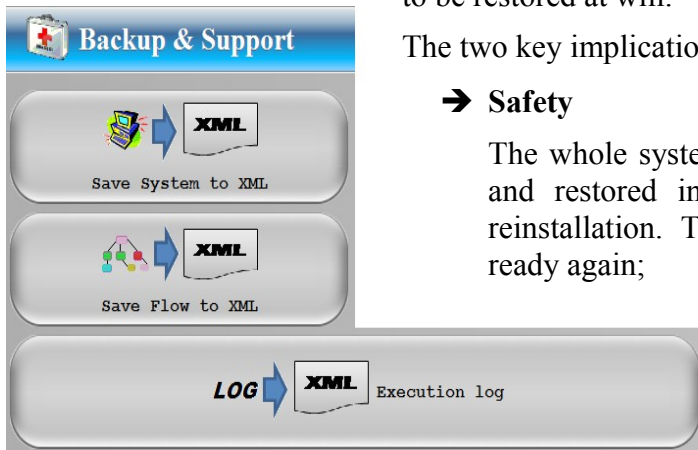
Languages

The whole User Interface may be instantly translated to meet user's preferences. Currently available languages are Italian, English, Portuguese and Spanish. Under development: French and German. Other languages can be added on demand.

Wide area installation

Actions, Conditions and Special Data allow for cooperation of separate and distant workstations. These workstations may be in different rooms of the same office as well as in different countries. They can nevertheless cooperate within the same Macro. This behaviour is a **key feature** for automation when distant elements are needed (eg. store availability confirmation for a multinational company) and often suffer delays due to this.

Support



The whole system configuration can be saved in XML format, ready to be restored at will.

The two key implications concern:

→ Safety

The whole system configuration can be stored in a safe place and restored in case of need, as it is after a failure or reinstallation. The Company logical flows get immediately ready again;

→ Support

Configuration can be easily sent to our Support service for analysis and development.

Different types of **Support subscriptions** are available.

System requirements

- ◆ Any version of Microsoft Windows® operating system (XP sp. 2 or above recommended)
- ◆ Interbase® (commercial product) or Firebird (open source) Database system
- ◆ Older computers can be used, due to the small footprint of CastFlow

Versions and licenses

Three versions are available: the smaller one is called "Base", presenting some functional limitations.

The "Business" one has a wider range of capabilities and the "Full" has no limitation at all.

It is always possible to switch to an upper the license level at any time, without losing any data. Logical flows don't have to be redesigned.

All versions include the Support tools.

More technical info on demand: please write an email to

marketing@castware.eu