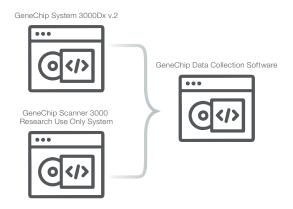


# Genetic analysis

# GeneChip Data Collection Software



Data collection software

#### Overview

The Applied Biosystems<sup>™</sup> GeneChip<sup>™</sup> Data Collection Software for GeneChip<sup>™</sup> System 3000Dx v.2 and GeneChip<sup>™</sup> Scanner 3000 systems greatly simplifies instrument control for both research use only (RUO) and diagnostic (Dx) system types. We have combined the capabilities of both our Applied Biosystems<sup>™</sup> Affymetrix<sup>™</sup> Molecular Diagnostic Software (AMDS) and our Applied Biosystems<sup>™</sup> GeneChip<sup>™</sup> Command Console (GCC) Software into the GeneChip Data Collection (GCDC) Software, all while providing advanced features and maintaining regulatory compliance.

The GCDC software is a single application that can control both RUO and Dx GeneChip 3000 systems and runs on Windows™ 64-bit operating systems. There are two options to choose from for system control, an IVD Launcher and an RUO Launcher. The availability of these options depends on which GeneChip 3000 system you have. In response to user feedback, we have made the following improvements to the GeneChip 3000 instrument control software:

- · An updated user interface with remote monitoring capability
- · Simplified batch registration of arrays
- Easy management of the client operating system, applications, and security for IT departments
- · Notifications for network path interruptions
- Language support

#### **Features**

GCDC software has an updated user interface that centers on ease of use. We provide the software in both IVD and RUO modes via separate launchers on the workstation. If the user has a GeneChip 3000Dx v.2 system, they are presented with both launchers that clearly and uniquely establish the mode of operation. IVD mode permits the user to operate within the defined scope of IVD operations as specified by the scanned barcode and the way the array was registered. The RUO mode, on the other hand, gives the user full flexibility to exercise any type of workflow. Results from runs using the RUO mode will always produce RUO designated data and runs using the IVD mode will produce either IVD data or RUO data depending on the array type and protocols used.

The batch registration process has also been simplified. Users will be provided with a template to enter array information that can then be imported into the application using the array registration interface that is present in either RUO or IVD mode.

GCDC software also implements cloud connectivity to enable remote monitoring of a fluidics and scanner run from a web interface.

#### **Benefits**

GCDC software provides an easier and more intuitive user experience with its updated user interface and notifications. The software allows for remote monitoring, which frees up laboratory personnel. This allows the user to focus on other tasks while array cartridges are undergoing fluidics or scan protocols. Users can easily check progress from a laptop or mobile device to see if attention to their microarray run is needed. In addition, batch registration of arrays is easy, allowing large sample runs to be managed more efficiently.

For laboratories that have both types of GeneChip 3000 systems, the single application keeps the user interface experience consistent and reduces complexity when working with either system.

The new GCDC software gives responsibility for IT policies to the user or their IT department. GCDC software allows a user's IT department to manage both application and security functions, which was not possible with the AMDS application.

Finally, GCDC software will be provided as an *In Vitro* Diagnostic (CE-IVD)-compliant application and will be available in various languages.

### **Applications**

The GCDC software applies to all array types supported on the GeneChip 3000 system platform.

#### System requirements

- Windows 10 64-bit operating system
  - GeneChip 3000 systems are shipped with a compatible workstation to accommodate the operating system requirements
  - GCDC software will be preinstalled on workstations purchased with GeneChip 3000 systems

# Software displays

1. GeneChip Data Collection Dx





2. GeneChip Data Collection (RUO)

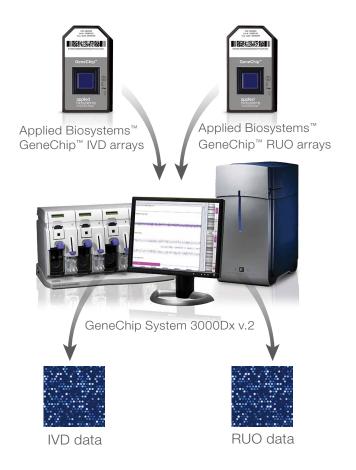




Splash screen (top) and application "Launcher" (bottom) show appropriate labeling and information.

# Array processing overview

# GeneChip System 3000Dx v.2 workflow



# GeneChip Scanner 3000 workflow

