



Informatica® SSA-NAME3(EXTN)
10.5

SSA-NAME3 (EXTN) Getting Started Guide

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Preface

Welcome to the Informatica SSA-NAME3 Getting Started (Extn) Guide.

This manual is intended to be the first technical material a new user reads before installing or using the SSA-NAME3 software, regardless of the platform or environment. The ultimate goal is to help a new user get the software installed and to produce a working prototype SSA-NAME3 application against their own data.

To achieve this it provides a "script" to follow which includes pointers to pertinent sections of the other manuals. It aims at showing the new user the minimum work involved in getting this prototype application working.

Learning About Informatica SSA-NAME3(Extn)

This section describes the various manuals that make up the SSA-NAME3 Extensions for 1.8 Users documentation set. That is, these manuals should be used to generate an SSA-NAME3 Service Group.

Introduction to SSA-NAME3

Provides an overview of SSA-NAME3. It is written in a way that can be read by someone who has no prior experience of the product and wants a general overview of SSA-NAME3. It explains the problems SSA-NAME3 overcomes and provides an overview of how this is done. One chapter is dedicated to providing an overview for Application Programmers.

Getting Started

This manual is intended to be the first technical material a new developer or designer reads before installing or using the SSA-NAME3 software, regardless of the platform or environment. Its goal is to help a new user get the software installed and produce a working prototype application that calls SSA-NAME3 and executes searches against their own data.

To achieve this it provides a "script" to follow which includes pointers to pertinent sections of the other manuals.

Definition & Customization Guide

The SSA-NAME3 software is customizable via modifications to various tables called Definition Files. This manual describes the contents and syntax of the Definition Files and provides tips & techniques for their customization.

Generation & Testing Guide

This manual describes the mechanics of producing a Callable SSA-NAME3 module or library (called a "Service Group") by generating the customizable Definition files and combining them with the supplied core modules. It also describes how to test the Callable Service Group using the SSA-NAME3 Test-bed.

The Callable Service Group is the module which provides the run-time Key Building, Search Strategy and Match services to user applications.

Application Reference

The ultimate goal of an SSA-NAME3 implementation is for application programs to be able to Call on its Services to build keys, effect searches and drive matching.

This manual describes in detail how an Application Program invokes the various SSA-NAME3 Services via the Callable Service Group. It describes the parameters required by these Services, what goes on within a Service, the information that is returned, and what the Application should then do with that information. The manual also contains program pseudo code and topics covering System & Database Design considerations.

Installation Guide

The SSA-NAME3 Installation guide provides information on how to install the product on Windows and UNIX.

Release Notes

The Release Notes contain information about What's New in SSA-NAME3 Extensions for 1.8 Users. It is also used to summarize any documentation updates as they are published.

What Do I Read If. . .

I am. . .

. . . a manager

The INTRODUCTION TO SSA-NAME3 will address questions such as "Why have we got SSANAME3?"

I am. . .

. . . installing SSA-NAME3

Before attempting to install SSA-NAME3 Generation software you should read the GETTING STARTED document. This will tell you about pre-requisites and help you plan the installation and implementation of SSA-NAME3 Service Groups.

The actual installation steps for your platform are documented in the separate SSA-NAME3 Extensions for 1.8 Users 9.5 manual's INSTALLATION GUIDE.

I am. . .

. . . an Analyst or Application Programmer

A high-level overview is provided specifically for Application Programmers in the INTRODUCTION TO SSA-NAME3 SERVICE GROUPS manual. Before attempting to develop programs that interface with SSA-NAME3 Service Groups you should also read the GETTING STARTED manual.

When designing and developing the application program(s), use the APPLICATION REFERENCE FOR SSA-NAME3 SERVICE GROUPS manual as your main guide. This describes the Service Calling conventions, required parameters and provides pseudo code examples.

Working sample programs in various languages can also be found on the SSA-NAME3 CD.

I am. . .

. . . customizing the SSA-NAME3 Definition Files

The DEFINITION & CUSTOMIZATION GUIDE FOR SSA-NAME3 SERVICE GROUPS provides all the information required to customize the definition files used by SSA-NAME3. Having done this you will need to generate the actual run-time modules required to link with your application. This is done by performing a process known as Generation. Generation is described in the GENERATION & TESTING GUIDE FOR SSA-NAME3 SERVICE GROUPS.

I want to know. . .

. . . what SSA-NAME3 does

The INTRODUCTION TO SSA-NAME3 manual gives an overview of what SSA-NAME3 does and how it does it.

I want to know. . .

. . . how to develop an Algorithm

Refer to the DEFINITION & CUSTOMIZATION GUIDE FOR SSA-NAME3 SERVICE GROUPS in a section called Tips on Customizing an Algorithm.

I want to know. . .

. . . how to develop an Edit-list

Refer to the DEFINITION & CUSTOMIZATION GUIDE FOR SSA-NAME3 SERVICE GROUPS in a section called Tips on Building an Edit-list.

I want to know. . .

. . . how to develop a Matching Scheme

Refer to the DEFINITION & CUSTOMIZATION GUIDE FOR SSA-NAME3 SERVICE GROUPS in a section called Tips on Developing a Matching Scheme.

I want to know. . .

. . . how to perform Generation

Refer to the Generation Section of the GENERATION & TESTING GUIDE FOR SSA-NAME3 SERVICE GROUPS.

I want to know. . .

. . . where to find the error messages

The non-zero Response Codes which can be returned to Calling application programs are documented in the Response Codes section of the APPLICATION REFERENCE FOR SSA-NAME3 SERVICE GROUPS manual.

Generation messages are documented in the GENERATION & CUSTOMIZATION GUIDE FOR SSANAME3 SERVICE GROUPS.

Informatica Resources

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CHAPTER 1

SSA-NAME3 Service Group Implementation

This chapter includes the following topic:

- [Overview, 10](#)

Overview

This document is intended to be the first technical material a new user reads before installing or using the SSA-NAME3 software, regardless of the platform or environment.

Its ultimate goal is to help a new user implement SSA-NAME3 Service Groups and produce a working prototype SSA-NAME3 application against their own data.

If the reader does not already have a general understanding of what SSA-NAME3 is and what it is used for, then it would be advisable to read the *INTRODUCTION TO SSA-NAME3 SERVICE GROUPS* manual first.

An Overview of the SSA-NAME3 Service Group Components

The SSA-NAME3 software must be customized before being used by applications. It therefore has a Customization Environment and a Development/Run-time Environment.

The SSA-NAME3 Customization Environment

The customization environment has four major components:

- *The Country specific Definition files*, which contain the default rules for how the name searching and matching software operates on data for different populations and different countries.
- *The Customization & Generation modules*, which allow the default Definition files to be customized for an organization's data and applications, and then re-built.
- *The Testing module*, which allows a callable SSA-NAME3 module to be tested in a stand-alone manner.

The customization environment is performed on Windows for all platforms except MVS, where native customization is available. MVS users are, however, encouraged to use Windows for customization for a more streamlined generation.

The Customization Environment is described fully in the *DEFINITION and CUSTOMIZATION GUIDE FOR SSA-NAME3 SERVICE GROUPS* and the *GENERATION and TESTING GUIDE FOR SSA-NAME3 SERVICE GROUPS*.

The SSA-NAME3 Development/Run-time Environment

The development environment is on the platform where the applications, which will use SSA-NAME3, are developed. This is often referred to as the target platform as it is the target for the customization work. The development environment is comprised of:

- *The Core modules*, which represent the non-modifiable kernel of the software and without which the other components would not work.
- *The Testing module*, which allows a callable SSA-NAME3 module to be tested in a stand-alone manner.
- *The API's*, which allow user applications to call SSA-NAME3 Services.

Details of application usage of SSA-NAME3 Services are described in the *APPLICATION REFERENCE FOR SSA-NAME3 SERVICE GROUPS* manual.

Most major platforms are catered for as targets. Also, the Win32 software always includes the development environment so that the stand-alone Testing can be done there. The **development environment** is therefore always itself a potential target.

The run-time environment is on the platform where the applications, which will use SSA-NAME3, are executed. The run-time environment is comprised of:

- *The Callable SSA-NAME3 module*, which has been prepared in the development environment. No other SSA-NAME3 modules are required in the run-time environment.

There is usually a need for a run-time environment on the same physical computer as the development environment, so that applications may be tested. This may simply be another library or directory or path where the Callable SSA-NAME3 module must be put to be accessible by the applications, or it may be in another physical address-space or partition.

The run-time environment can also be on a different physical computer than the development environment providing it is running the same operating system as the development environment. For this, an additional license is required. This is often referred to as the production environment.

In both cases, it is only the Callable SSA-NAME3 module which needs to exist in the run-time environment.

Resources Required to Implement SSA-NAME3

The following lists show the typical resources required to implement SSA-NAME3 Service Groups and develop a prototype application.

Hardware, Software, Data & Data Storage Resources

A computer running Windows Operation System

This is the computer on which the SSA-NAME3 Service Group customization, and generation work is performed. It must be running a Windows 32-bit operating system, e.g. Windows XP.

This environment also requires the Microsoft Visual C++ 32-bit compiler (Standard, Professional or Enterprise Edition). "Professional" is recommended. The compiler should be Version 6 or later and be installed prior to SSA-NAME3.

Connection from Windows System to Target Platform(s)

The Service Group Data File needs to be transferred from the Windows computer to the target platform(s). This is normally done with automated File Transfer software.

Target computer

Where your applications are developed and executed. Most major platforms are supported.

Disk Space

Allow 30MB for the installed software on both the Windows computer and target development platforms.

Sample Data Files

As input to the customization process you will need to have available a flat file of names extracted from your production database for each population of names which you intend to use for searching or matching. For more information on preparing Sample User Data Files, see the Overview section in the *GENERATION and TESTING GUIDE FOR SSA-NAME3 SERVICE GROUPS*.

Data to be used in testing

This is the data on which you will build your prototype SSA-NAME3 Keys and on which you will perform your prototype search. This could be the same data as used for the Sample Data Files, it could be the Production database or a copy of the Production database, or it could be any other data, although if the data is not 'real' you will not get any idea of the quality of search from the prototype.

A New Database Table defined

If you will be using multiple keys, which is recommended, a new table or indexed file needs to be setup to contain the SSA-NAME3 Keys and other data, unless your database supports a repeating field structure in which case one such repeating field structure is all that is required. If you will only be using the single key option, simply a new field or column needs to be added to the existing names table or file. For more on Database design, refer to the *Introduction for Application Programmers* section of the *INTRODUCTION TO SSA-NAME3 SERVICE GROUPS* manual and the *Database Design Notes* section of the *APPLICATION REFERENCE FOR SSA-NAME3 SERVICE GROUPS* manual.

Application Development Language

To be able to use SSA-NAME3 to build keys, drive searches and perform matching, you need an application development language which supports a Call to an external routine. Your application needs to be able to call a C routine or library, except if you are MVS or DOS/VSE, in which case it needs to be able to call an Assembler routine.

Human Resources

The following human resources (or tasks) are required to install and implement SSA-NAME3 in a prototype application.

Installer

The SSA-NAME3 software needs to be installed on to a system, so that it may be customized, as well as on to the computer where the applications will be developed, the target. (MVS users can, but do not need to, install on the system). While the installation is not difficult, some organizations require that this to be done by a systems person.

Analyst/Programmer

To customize SSA-NAME3 Service Groups and build the prototype application. The A/P should be fluent in the development language chosen for the prototype and be comfortable with the OS command language of both the target and system. (It is often a good idea if this person is later given the job of implementing SSA-NAME3 into the real system). This is also often the person who carries out the installation.

Database Administrator

To define and optimize the new database table, or new column to an existing table.

Of course it is up to the organization's size, structure and rules as to whether some of these tasks are carried out by the same person, and how this person or persons are managed.

SSA-NAME3 Service Group Installation Overview

This section provides information on the Service Group Installation.

How SSA-NAME3 is Delivered

All users who are either licensing or evaluating SSA-NAME3 Service Groups should receive the SSANAME3 Extension for 1.8 Users CD and Documentation Set. (As stated before, MVS users can choose not to use the CD, however, it contains other information such as the electronic documentation, on-line Help and Sample Applications which are quite often useful).

If you will be using SSA-NAME3 on a target platform that could not be packaged on to the CD, you should also receive other media, such as a magnetic or DAT cartridge or tape, containing the Development Environment for that platform.

Choices to be Made Before SSA-NAME3 Installation

Before performing the Installation, you should decide which country's Definition files you will need. You should install all countries that you may need to use SSA-NAME3 for. In most cases only one country will be required.

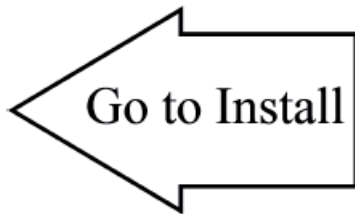
If you have chosen more than one country to install, you should also keep in mind one of those countries to use to test the installation and to build the prototype application around.

MVS users need to decide whether they will use the system for customization or not.

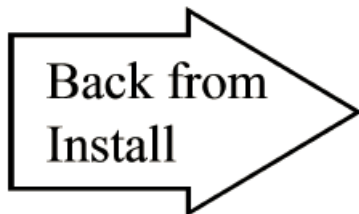
Installation Sequence

It is a good idea to install the target software first (e.g. Unix, MVS). This is because, once you start performing the Generation work on the system, there needs to be somewhere to transfer the Service Group Data File to, and this will be the target platform area where SSA-NAME3 was installed.

After installing the target software, next proceed with the following installation.



The Installation processes themselves are documented in detail in the *SSA-NAME3 (Extn) INSTALLATION GUIDE*.



Once the installation has been completed, what you will have available is a callable SSA-NAME3 Service Group module or library built from the Fast-start country definition files and ready to be used by application programs. This Service Group module should be on the platform where your application will execute.

CHAPTER 2

SSA-NAME3 Service Group Prototype Application

This chapter includes the following topics:

- [Overview, 14](#)
- [Choosing the Data to Search, 15](#)
- [Choosing the Mode of Search, 15](#)
- [Generating a Customized SSA-NAME3 Service Group, 15](#)
- [Defining a New Database Table, Column or File, 16](#)
- [Developing the Application Programs, 16](#)
- [After the Prototype is Working, 17](#)

Overview

Even though it would be your intention to eventually integrate the SSA-NAME3 search, match & keybuilding facilities into a system, it is a good idea to first get a stand-alone prototype application working satisfactorily against your data. This allows familiarization with the software and how it works without confusion from other system requirements.

Once the prototype is working satisfactorily, you will have the necessary knowledge and be in a much better position to integrate the software into the system.

To prototype an SSA-NAME3 application requires:

- Choosing the data to search or match on and choosing whether the prototype application will be on-line or batch.
- Generating an SSA-NAME3 Service Group customized to your data and application's needs and made available in the environment where the applications will execute.
- Defining a new Database table to hold the SSA-NAME3 Keys and other data.

Developing two prototype programs:

- the Key-Load program.
- the Search & Match program.

You are encouraged to reference the sample programs supplied by Informatica Corporation on the CD or the pseudo code in the *APPLICATION REFERENCE FOR SSA-NAME3 SERVICE GROUPS* manual.

Following is more information on these tasks.

Choosing the Data to Search

SSA-NAME3 can be used to search on the following types of names:

- Person names
- Company/Business names
- Mixed Person/Company/Business names
- Addresses
- Other short descriptive text (e.g. product/component/medical names, song titles / book titles)

It is important to choose data that is available in both reasonable quality and quantity. It is not a good idea to build the prototype to search on the made-up names in the development database. It is a much better idea to use an extract or copy of some real data.

Choosing the Mode of Search

The following factors may help you choose between an on-line search prototype or a batch prototype:

- what was the main purpose for evaluating or purchasing SSA-NAME3 ?
- how quickly does the prototype need to be delivered?
- where are the analyst/programmers skills?

For example, if the main purpose for using SSA-NAME3 is for batch file matching, or the prototype needs to be delivered quickly and either the analyst/programmer does not have on-line skills or the on-line environment is difficult to build in, then a batch program could be the right choice, otherwise an on-line program is usually more interesting and the results are easier to present to others.

Generating a Customized SSA-NAME3 Service Group

By now SSA-NAME3 should have been installed and the fast-start Service Group for the chosen country built.

It is now necessary to customize that Service Group to take account of the prototype application and data.

If the user wishes to understand customization steps in detail, read the following sections of the *DEFINITION and CUSTOMIZATION GUIDE SSA-NAME3 SERVICE GROUPS* guide:

- Tips on Customizing an Algorithm
- Tips on Developing a Matching Scheme

Using these sections as a guide, make the necessary changes to your Algorithm definitions or Matching Scheme definitions. There is a Summary paragraph at the end of these sections.

Once the necessary Definition File changes have been made, the new Service Group needs to be generated.

This involves more steps than the initial generation of the Fast-start Service Group, which happened during the install process, for which only one or two canned jobs needed to be run. The steps are described in the *GENERATION and TESTING GUIDE FOR SSA-NAME3 SERVICE GROUPS*. For a full appreciation of Generation, the *Overview* section of that manual should be read first.

It is during this task that you will probably need some telephone assistance from Informatica Corporation.

Defining a New Database Table, Column or File

A new database table or indexed file needs to be established to hold the SSA-NAME3 Keys and other data. If you are only storing a single key (not recommended), then only a new column or field on an existing table or file needs to be defined. If your database supports a repeating field structure, which can be indexed, this will do, although better performance can be achieved by defining a new table. The size of the SSA-NAME3 Name key field is as you defined in the Algorithm in the previous step (usually either 5-bytes binary or 8-bytes character).

The minimum number of columns or fields in this new table or file is two, the *SSA-NAME3 Key* and a *Record-Id* field to point back to the master record where the name came from. It is recommended, however, that for the sake of good performance, this table be de-normalized to include the name and other identifying data. For more information on this, read Introduction for Application Programmers section in the *INTRODUCTION TO SSA-NAME3 SERVICE GROUPS* guide and the Database Design Notes section in the *APPLICATION REFERENCE FOR SSA-NAME3 SERVICE GROUPS* manual.

Developing the Application Programs

If you have chosen to develop an on-line program, the samples supplied on the CD will be a good reference base. For batch programs, the supplied samples will also be a good reference in conjunction with pseudo code documented in the *APPLICATION REFERENCE FOR SSA-NAME3 SERVICE GROUPS* manual.

Before doing any work on the prototype application, read the following sections of the *APPLICATION REFERENCE FOR SSA-NAME3 SERVICE GROUPS* manual: *Introduction*; *NAMESET*; *MATCH*.

For more information on Searching, read the following sections in the *NAMESET* chapter: *How an Application Processes the Keys Stack*; *How an Application Processes the Search Table*; *Tips on Choosing a Search Strategy*.

For more information on Matching, read the *MATCH/Operation* section.

The Supplied SSA-NAME3 Service Group Sample Programs

The `ids\ssaname\samples\programs` folder on the SSA-NAME3 Extension for 1.8 Users CD contains a sample on-line search program and a key-load program, coded in various development languages from the pseudo code found in `ids\ssaname\samples\programs\pseudo`.

The sample key-load program will have the name `protokb` and the sample search program the name `protosh`.

In some cases these programs can be executed against an Access database provided in `ids\ssaname\samples\data`, however, this depends on the development language. The Access database is provided to demonstrate how the programs work, rather than to demonstrate the quality of an SSA-NAME3 search which should be left for your prototype.

The `readme.txt` file in `ids\ssaname\samples` contains further information about these sample applications.

How to Use the SSA-NAME3 Service Group Sample Programs

The sample programs are intended to be a starting point for your own prototype development. You can either copy one of these programs and change it to your needs, or write your own program from scratch making reference to the pseudo code and to these programs.

The minimum that would need to be changed in these samples for your prototype is:

- the database environment statements
- the database and file structures: *you will have your own database and field names*
- the database field names: *are used in various places with in the program and will need to be changed to your requirements*
- the name of the SSA-NAME3 Service Group being Called: *you should use the Service Group generated for your country and population of data.*
- the screen or form variables: *the samples are set up to get a person's name, date of birth and street address from the screen as search and matching criteria, whereas you may have different needs.*

Other changes, which may need to be made, are:

- the name of the NAMESET service: *the samples are set up to run against a Person name population (NAMESETP), whereas you may want to run it against another population type, such as Company names (NAMESETC) or Street names (NAMESETS).*
- the NAMESET Function parameter can be varied to demonstrate different Search Strategies.
- the name of the MATCH Scheme name: *the samples uses a Scheme which matches person name, date of birth and address, whereas you may have different data to match.*
- the length of the SSA-NAME3-NAME-IN field and the structure of the SSA-NAME3-SCORE-SEARCH-DATA and SSA-NAME3-SCORE-FILE-DATA fields.
- the structure of candidate, match and sort arrays, which contain data from the database.
- the sample programs are set up to use the 8-byte SSA-NAME3 Key format. If you will be using the 5- byte binary key format (recommended if your database and programming language can support binary keys) then the structure and lengths of the following NAMESET parameters will need to be changed: SSA-NAME3-KEYS-STACK and SSA-NAME3-SEARCH-TABLE.

The comments in the pseudo code also help identify what may need to be changed in these programs.

After the Prototype is Working

Once you have a working prototype of an SSA-NAME3 searching and matching application, you will probably want to demonstrate it to users from a functional point of view and make any changes to bring it broadly into line with those expectations.

The next step may be to generate the SSA-NAME3 Keys and use the search application on production data, or a copy of production data, if this had not already been done for the prototype. This will allow users to get a feel for the real performance and reliability of the search results. The feedback from this step is crucial to getting SSA-NAME3 tuned to the needs of the users and constraints of the system.

This feedback may necessitate changes to the Algorithm Definition, the Edit-list Definitions, the Search Strategy or the Matching Schemes.

At this stage you will probably need to start referencing the more detailed sections of the *DEFINITION and CUSTOMIZATION GUIDE FOR SSA-NAME3 SERVICE GROUPS* and *APPLICATION REFERENCE FOR SSA-NAME3 SERVICE GROUPS* manual. As stated in the *GENERATION and TESTING GUIDE FOR SSANAME3 SERVICE GROUPS*, if you make changes to the Algorithm or Edit-list definitions, you will need to re-generate the SSA-NAME3 Keys on the database.

Often coinciding with this last phase is planning SSA-NAME3's implementation into the real system. This is not usually as simple as just enabling the search and key-building applications in the production environment

- one very important step still needs to be taken care of. So far, you have only built a prototype key-loading program. In a real system, on-going maintenance of the names file is an ongoing real-time function. Therefore, the insert/update/delete transactions, which maintain the names file, will also need to maintain the SSA-NAME3 Keys associated with those names.

These next stages typically require the following extra human resources.

Business Analyst	Optionally to facilitate finding out what the users really need to achieve with the searching & matching software.
Project Leader/ Systems	Analyst To design & plan the way in which the SSA-NAME3 Service Group facilities will be integrated into the system.
User(s)	To use the search application, review its results, and provide feedback that may lead to further customization and tuning of the application or SSANAME3.

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