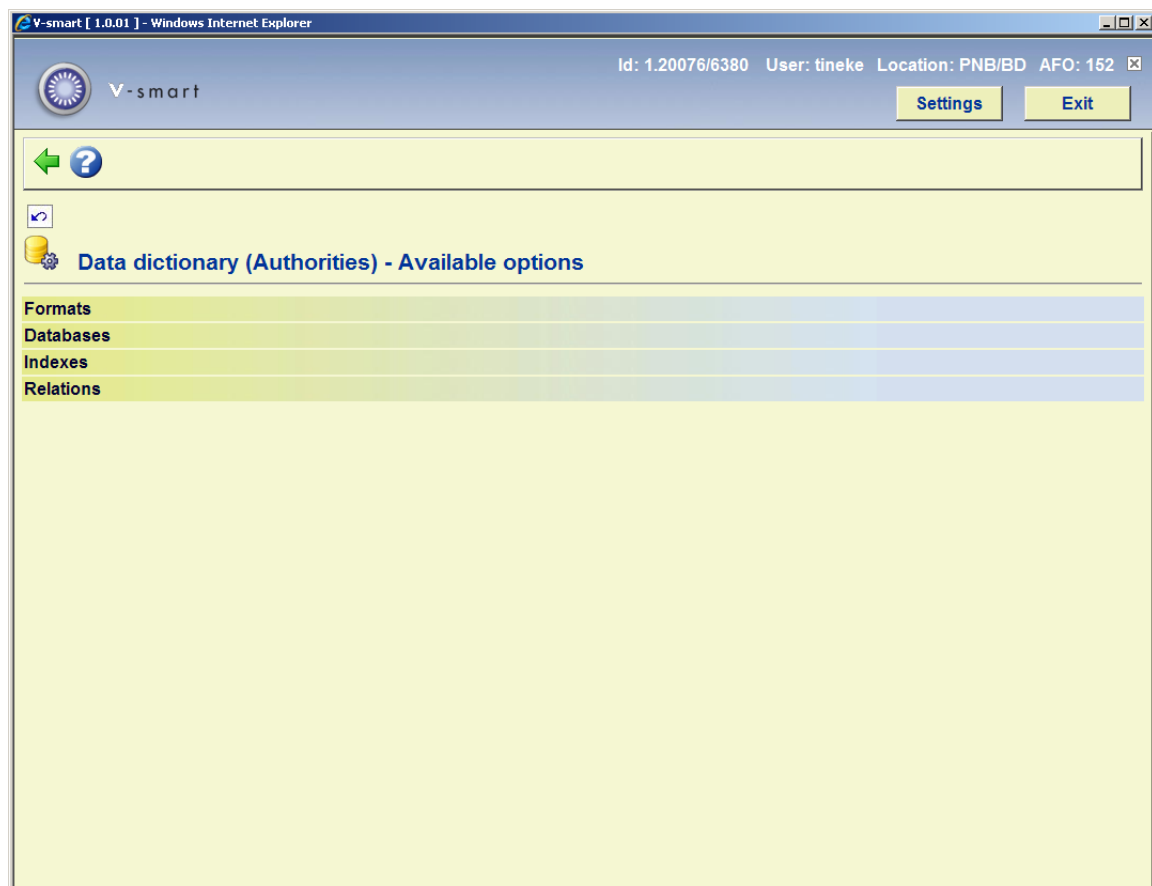# AFO 152 - Data dictionary for authorities

152.1 The authority-format

An authority format contains the definition of which fields are part of an authority record, which subfields each of the fields can have, what the characteristics are of fields and subfields, etc.
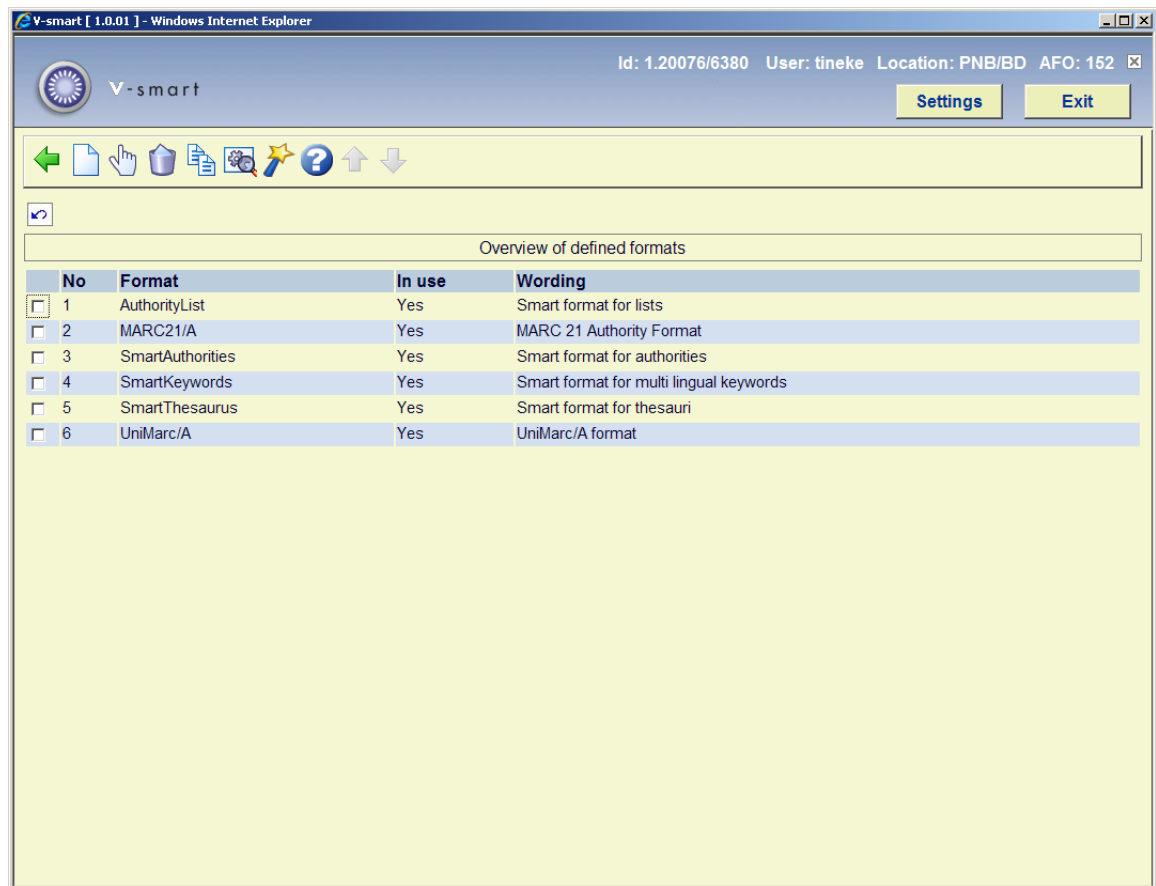
After selecting this AFO, the main menu is shown:

The options are described in the next paragraphs.

152.2 General characteristics of a format

Go to AFO 152 and choose **Formats**, this will result in a list of authority formats defined on your system:

Each format has its own properties. You can view these by selecting a format and then clicking on the icon **View properties of format**.

You can then change these properties by clicking on the icon **Change all properties**.

In the screen below you can change the general properties of a format. Normally it is not necessary to do this. Only when you design your own format will you need to do this.
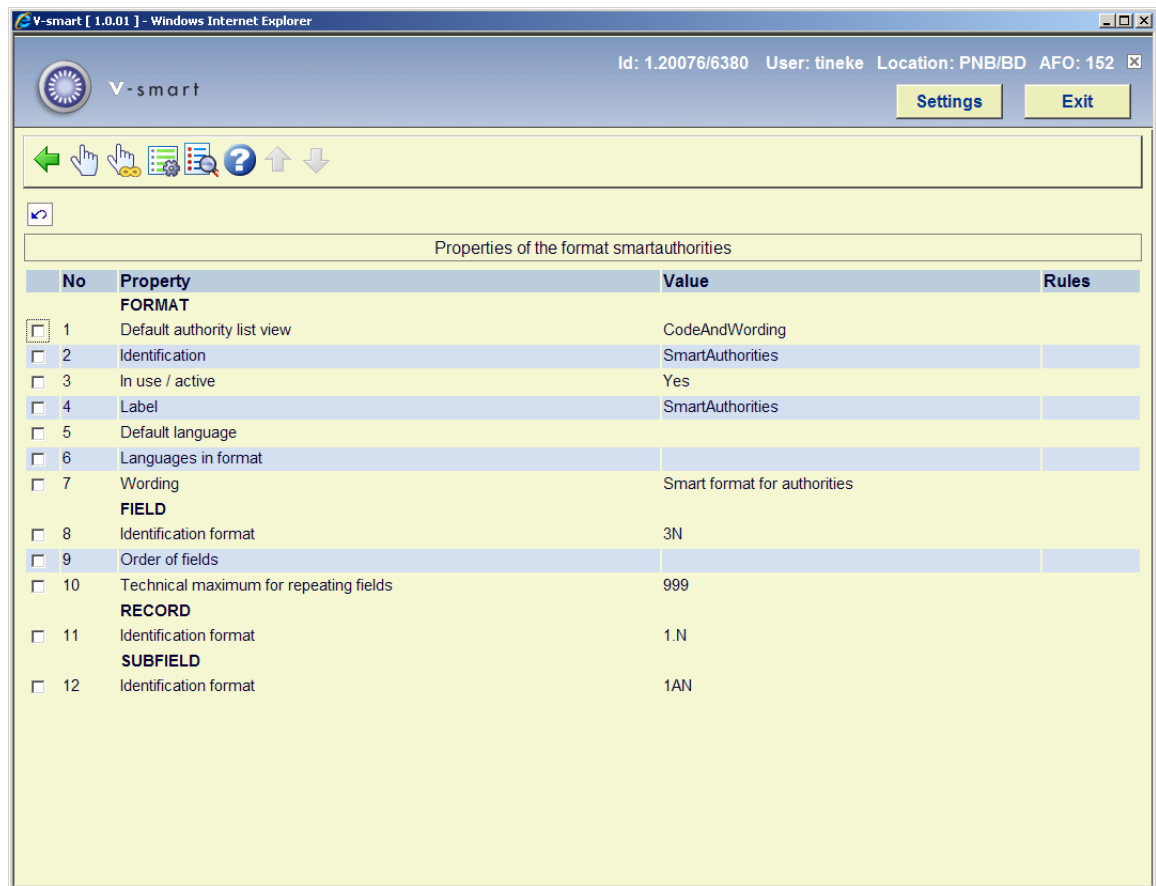
A description of the properties shown on this screen:

Property	Description
Default authority list view	The way in which *authority lists* can be presented. You can choose between code only or code plus wording.
Identification	The name of the format. You can not change this after the format has been defined.
In use / active	You can tick a box to denote the format can be used. You cannot create a database for an inactive format.
Label	The name of the format as presented in lists etc. The label can be changed.
Default language	The language in which cataloguing will be done in special cases where a specific language cannot be defined.

Languages in format	V-smart supports multilingual fields, e.g. subject headings in multiple languages. Here you define which languages can be used.
Wording	Free text description of the format.
Identification format (Field)	Here you define how fields are named. The notation '3N' in the example means 3 numeric characters.
Order of fields	This can be used to determine a specific mandatory order of fields for the format. This order will be applied when saving records, even if a different order was used in the template to create the record.
Technical maximum for repeating fields	Repeatable fields are "infinitely" repeatable in theory; but for technical purposes there is a maximum, which is defined here.
Identification format (Record)	Records in a database have an identification. Usually this is a number. Here you define how identification is done. The "1.N" in the example means an infinite number of numeric characters. If you were to put "1.4N" here it would mean that the number identifying a record can consist of a maximum of 4 numeric characters, i.e. a maximum of 9999. Which means you cannot enter more than 9999 records on the database.
Identification format (Subfield)	The definition for this is similar to the identification of records. The "1AN" in the example means one alpha numeric or numeric character.

152.2.1 The fields

As an example the fields of the Smart authority format are shown. The bibliographic Smart format has four corresponding authority formats:

- The SmartAuthorities format: This is used for the more extensive authorities like author, keyword, etc. This format can hold multiple fields for an authority, e.g. a keyword can consist of multiple subdivisions, an author can consist of first name, last name, date of birth, etc.

- The AuthorityList format: This is a simple list format for terms that only consist of a code and a description, e.g. material type.

- The SmartKeywords format: This format has multiple subfields like the extensive authority format, but also allows for keywords in multiple languages.

- The SmartThesaurus format: A special format for thesaurus headings with their corresponding fields such as 'broader term', 'narrower term', 'scope note', etc.

For a keyword the field in the example below (SmartAuthorities format) can consist of a 220 field with the heading, a 520 field with the see-also reference and a 300 field for notes.

No	Field	Wording	Type	Mand.	Max.	In use	Subfields	Rules
1	200	Name of person	Text	No	1	Yes	$a,$b,$c,$d,$f	No
2	210	Corporation	Text	No	1	Yes	$a,$b,$c,$f	No
3	220	Keyword	Text	No	1	Yes	$a,$b,$c,$d,$e	No
4	230	Classification code	Text	No	1	Yes	$a,$b	No
5	240	Uniform title	Text	No	1	Yes	$a,$b,$c,$d,$e,$f,$g	No
6	300	Note	Text	No	999	Yes	$a	No
7	400	See reference from : name of person	Text	No	999	Yes	$3,$a,$b,$c,$d,$f	No
8	410	See reference from : corporation	Text	No	999	Yes	$3,$a,$b,$c,$f	No
9	420	See reference from : keyword	Text	No	999	Yes	$3,$a,$b,$c,$d,$e	No
10	430	See reference from : classification code	Text	No	999	Yes	$3,$a,$b	No
11	440	See reference from : uniform title	Text	No	999	Yes	$3,$a,$b	No
12	500	See also reference : name of person	Text	No	999	Yes	$3,$a,$b,$c,$d,$f	No
13	510	See also reference : corporation	Text	No	999	Yes	$3,$a,$b,$c,$f	No
14	520	See also reference : keyword	Text	No	999	Yes	$3,$a,$b,$c,$d,$e	No
15	530	See also reference : classification code	Text	No	999	Yes	$3,$a,$b	No
16	540	See also reference : uniform title	Text	No	999	Yes	$3,$a,$b	No
17	700	See reference : name of person	Text	No	999	Yes	$3,$a,$b,$c,$d,$f	No
18	710	See reference : corporation	Text	No	999	Yes	$3,$a,$b,$c,$f	No
19	720	See reference : keyword	Text	No	999	Yes	$3,$a,$b,$c,$d,$e	No
20	730	See reference : classification code	Text	No	999	Yes	$3,$a,$b	No
21	740	See reference : uniform title	Text	No	999	Yes	$3,$a,$b	No

Fields on the screen

No: The sequence number on the screen. This bears no relation to the format structure.

Field: The coded field name. In the Smart, MARC21 and UniMarc authority formats these codes consist of 3 numbers; the field names therefor are 001 through 999.

Wording : A description of the fields.

Type: The type of field. In most cases this will be "Text", but it can also be another of the 11 types available within V-smart.

Mandatory : Denotes whether or not a particular field is mandatory when creating a record.

Max.: The maximum number of times a field may be repeated within a record.

In use: Whether or not the field is in use. With this you can disallow use of a field within removing it from the format.

Subfields: A list of subfields valid for each field. Subfields have a coded name consisting of a number or letter prefixed by a $ sign.

Rules: For each field rules can be defined. E.g. "if field X exists then this field is mandatory". Several common formats such as MARC21 use such rule sets.

You can change the properties of a field by selecting a field and clicking on the icon **View properties of field**.

152.2.2 The properties of a field

After choosing the option to display properties of a field the system shows the following screen. In the example field 220 (keyword) of the Smart authority format is chosen:

No	Property	Value	Rules
	GENERAL		
1	Comments and notes		
2	Data type	Text	
3	Definition	Contient; sous sa forme de vedette; le nom générique d'une famill ...	
4	Examples		
	Identification	**220**	
5	In use / active	Yes	
6	Punctuation after field		No
7	Punctuation before field		No
8	Label	220	
9	Language dependant	No	
10	Mandatory	No	No
11	Maximum number	1	No
12	Minimum number	0	No
13	Standard field	Yes	
14	Unique value	No	No
15	Wording	Keyword	
	FORMAT		
16	Right justified	No	
17	Default		
18	Fill character		
19	Fixed length	No	
20	Format pattern		No
21	Format test		No
22	Generated data		No
23	Maximum length		No
24	Minimum length		No
25	Modification allowed	Yes	
26	Valid values		No
	RELATIONS		
27	Relation to (default)		
28	Authority generation profile(s)		
29	Order of subfields		
30	Related fields		
31	Viewer		
32	Viewer table		

152.2.3 Subfields and their properties

From the overview screen of a format select a field and click on the icon **View subfields of field** (or double click on a field) to display the subfields defined for that particular field:
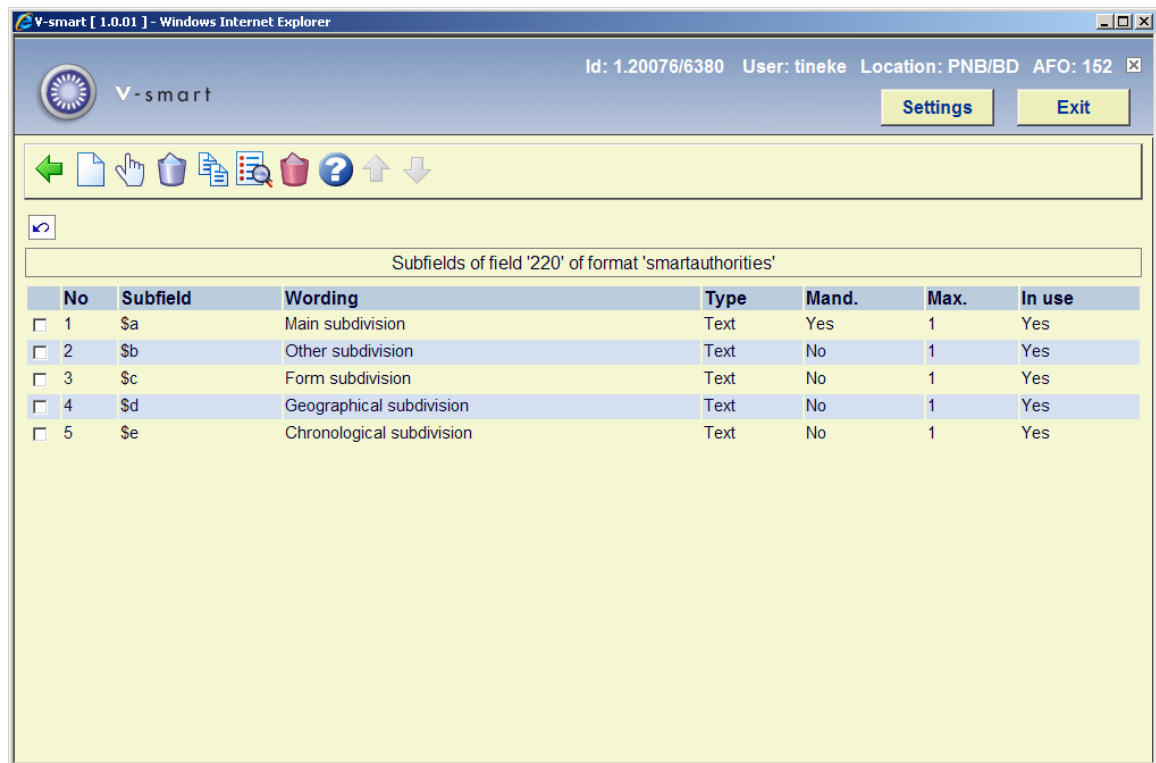
By double clicking on a subfield you can look at the properties of that particular subfield. The properties of a subfield are similar to those of a field. Changing them is done in the same way as for fields. See section 152.2.1 for a description of the column headings on the screen displayed above. Usually the subfields of an authority follow the same structure as their opposite number in bibliographic fields.

152.3 Element/Group profiles

From the overview screen of a format click on the icon **Element/Group profiles** to display a list of defined profiles. On this screen sequence no., name, type and description of all profiles are displayed. See the relevant section in the help for AFO 151 for detailed information.

152.4 Databases

When choosing the second option from the AFO 152 main menu – Databases – a list is shown of databases already defined:

	No.	Database Id	Wording	Format	In use
□	1	4	Authors	SmartAuthorities	Yes
□	2	5	Corporations	SmartAuthorities	Yes
□	3	6	UDC	SmartAuthorities	Yes
□	4	7	Dewey	SmartAuthorities	Yes
□	5	8	Code 1	SmartAuthorities	Yes
□	6	9	Genres	SmartAuthorities	Yes
□	7	10	Code 2	SmartAuthorities	Yes
□	8	11	Code 3	SmartAuthorities	Yes
□	9	12	Code 4	SmartAuthorities	Yes
□	10	13	Code 5	SmartAuthorities	Yes
□	11	14	Keyword 1	SmartAuthorities	Yes
□	12	15	Keyword 2	SmartAuthorities	Yes
□	13	16	Keyword 3	SmartAuthorities	Yes
□	14	17	Keyword 4	SmartAuthorities	Yes
□	15	18	Keyword 5	SmartAuthorities	Yes
□	16	19	Keyword 6	SmartAuthorities	Yes
□	17	20	Keyword 7	SmartAuthorities	Yes
□	18	21	Keyword 8	SmartAuthorities	Yes
□	19	22	Keyword 9	SmartAuthorities	Yes
□	20	23	Uniform title	SmartAuthorities	Yes
□	21	28	OpenURL genre	AuthorityList	Yes
□	22	29	General Material Designation	AuthorityList	Yes
□	23	30	Languages (LOC)	AuthorityList	Yes
□	24	31	Uitgevers	AuthorityList	No
□	25	32	Relator codes	AuthorityList	Yes
□	26	100	Alphabet Titre	AuthorityList	Yes
□	27	101	Altitude	AuthorityList	Yes
□	28	102	Conservation Reliure	AuthorityList	Yes
□	29	103	Doc Anciens Reliure	AuthorityList	Yes
□	30	104	Doc Anciens Ouvrage	AuthorityList	Yes
□	31	105	relié avec	AuthorityList	Yes

Click on the icon **New database** to create a new one. This will result in the following input screen:

The various properties of a V-smart authority database in AFO 152:

Property	Description
Number	The database identification number. Number 1 is always a system database. Therefor the first new database will always be number 2. When creating a new database a number is assigned automatically. It is not recommended to change this number (although it is possible on this screen).
Name	A short, descriptive name for the database.
Directory	The directory (called *namespace* within the Caché database server) where the database must be stored. U can choose a different directory/namespace from the current one, but that must be a correct V-smart namespace.
Format	The authority format for the database.
Database type	To determine whether this database will contain a list, full authorities or thesaurus headings (see section 152.2.1

	for an explanation).
Comments and notes	Free text.
Record counter	This is a sequence number for the authority records in the database. For a new database this will always be zero. After you start using the database and fill it with records this counter will be incremented. It is possible to amend that counter here. Warning: never amend this counter for a database in use without consulting Geac staff first.
In use	As long as this property has not been set, the database cannot be used. Later you can disable an existing database in this way, without having to physically remove it.
Number of copies to store	You can retain previous versions of edited authority records. The number of version you wish to retain is specified here.
Include archive file	When a authority record is deleted and this parameter is set to *Yes*, then the last version of that record will be stored in the archive file.
Administrative info allowed	This is should be set to *'N'* for authority records.
New record creation allowed	Whether or not creation of new records is allowed.
Normalized form in upper case	For indexes headings are normalized, i.e. punctuation is stripped and the string is converted to upper case.
Normalized form in diacritics	Whether or not diacritics are to be stored in normalized form. If you set this parameter then Boll and Böll will be two different headings in the database.
Check on near matches [only authors]	When creating a new authority record via cataloguing in AFO 111 or directly in AFO 113 the system can check if matching terms already exist in the database. The user is then warned against possible duplications.

	This applies only to databases containing author names.

After you have set the above properties on the input screen you have to call up the database definition again by selecting the database and clicking on the icon **View/modify database**.
Now you see two more properties.

Storage data mapping	This is not in use for authority records.
Display data mapping	Determines the content of the brief bibliographic information as displayed on the technical overview screen. For each of the five elements you can define a element/group profile to be displayed. See also the section on element/group profiles for more information.

152.5 Indexes

It is possible to search for authority records separately in AFO 113, during data entry in AFO 111 and with a browse search in the WebOPAC. Data is stored in an index to enable quick access to an authority record which contains this data.

152.5.1 Mechanism sets

For the definition of indexes so-called **mechanism sets** are used. There are predefined mechanism sets installed on the system. It is not recommended to create your own without consulting Geac staff.

A mechanism set is a set of indexing rules that can be applied to certain fields. The mechanism set for *word* looks like this:

1. Collect fields and or subfields.

2. Replace punctuation with spaces.

3. Remove leading, trailing and double blanks.

4. Determine individual words

5. Transform diacritics to non-diacritics in uppercase.

6.   Transform to uppercase.

7.   Remove words defined in stopword lists.

8.   Determine display form of index term.

9.   Create automatic references for filing terms.

V-smart knows various standard mechanism sets. You can use these to define your own indexes.

152.5.2 Creating an index

In AFO 152 -> Indexes -> Indexes, click on the icon **New index**. This will bring up an input screen where you can define the new index:

Give the index a name and a description and optionally put in comments.

Property	Description
Mechanismset	Select a mechanism set to be used for building this index. See section 152.5.1 for an explanation.
Authority database	Select the database(s) to which this index applies.

Search directory	The namespace that contains the index used for searching. Normally the default (MASTER) namespace.
Update directory	The namespace that is used to (re)builld the index. Normally the default (MASTER) namespace.
Available for staff searches	Determine whether or not this index is available for staff searches (i.e. from the standard search tab in AFO 111, 211, 321, 421 etc.).
Combine multiple subfields	Normally a separate entry is created for each subfield defined for index build. When this option is ON< all subfields are combined as a single entry.
Browse display	You can optionally choose an element/group profile to be used for presentation of the result list. This can be useful for .e.g. classification indexes.
Used for bibliographical databases	It is possible to select one or more bibliographical databases that use this index. Normally only bibliographical indexes are available for bibliographical databases. With this option you can make authority indexes also available.
Excepted relations	You can exclude certain relation types when building an index. So you can for instance build an authority index on author names as subject (this is a different relation type from main authors).

Note:

When you create a new index this is not automatically filled with data. This only happens when you create or import new authority records or edit & save existing records in AFO 113. Alternatively you can re-index existing records through AFO 158.

Indexes are available in the Vubis staff interface if the parameter "Available for staff search" is set. For the WebOPAC you determine separately which indexes will be available (through the WebOPAC preferences). This enables you to offer different indexes for staff and public.

152.5.3 Stopword lists

Stopwords are words that are not indexed. These words are also ignored when entered as part of a search string.

Stopword definitions are language dependant, because what may be a noun in one language (English: "ten") can be a preposition in another language (Dutch: "ten").

In the Smart format the system checks the contents of tag 101 to determine the language of the publication. In the MARC21 format, it depends on the setup of the restriction index for language. Normally the system will first check the language field in tag 008, and then tag 041.

Note

The option "No sorting" is no longer functional.

Once a stopword list has been defined, it can be associated with a mechanism set.

152.5.4 Reference lists

Reference lists are used during the automatic creation of index terms (e.g. for author names with prefixes like van den broek, 't hart, de la fontaine). The entries in these lists ensure there will be additional entries in the index.

So basically reference lists are the opposite of stopword lists. But:
If you have a general stopword list that includes for instance the French leading article "LA", this ensures this term will be ignored when indexing and searching for 'la maison'. If you also have a reference list for author names that also has the French leading article "LA", it means you will be able to search for and retrieve the author "la fontaine".

They are also language dependant (see stopword lists above for an explanation).

Once a reference list has been defined, it can be associated with a mechanism set.

152.5.5 Character lists

In character lists you can define a list of characters that can be used as part of a mechanism set (see above). When you use the mechanism list ReplaceCharacter all characters as defined in the list will be replaced by a blank. When you use the mechanism list RemoveCharacter all characters as defined in the list will be removed from the string to be indexed.

152.6 Relations

The fourth part of AFO 151 is **Relations**. Relations deals with the link that can be made between various records in the same database.

Contrary to bibliographic records there is only a small set of possible relations for authority records. For the SmartAuthorities format this is only for see and see-also references.

Relations are always reciprocal. When you create a reference to another record the reciprocal relation is created automatically in that record.

Cars see also automobiles: Both terms may be used. When you create the relation for cars, a reciprocal reference from automobiles to cars is made.

Automobiles see cars: Cars is the preferred term. When you create a see reference with automobiles, a see from reference will be created for cars.

Cars see from automobiles: Cars is the preferred term. When you create a see from reference with cars, a see reference will be created from automobiles.

- **Document control - Change History**

Version	Date	Change description	Author
1.0	May 2008	creation	
2.0	April 2010	new options for indexes; general overhaul part of 2.0.06 updates	