

11.A.2.5. Genre Search (Hierarchical Search)

This search frame is created for the following procedure in hierarchical search:

Select a city (list screen) and then select facility (list screen)

Some data creators may want to create a desired hierarchical configuration. This section describes a mere example.

With this search frame, a search volume is created for each genre as in the domestic model. A further volume management system is used for management under the data management frame.

11.A.2.5.1. Genre Search Frame

11.A.2.5.1.1 Search Frame Management Frame

name [Management Frame of Search Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	16		Management Frame Header of Search Frame		a
2	16	X		Detailed Search Information Record of Genre Search - #1		a

11.A.2.5.1.1.1. Management Frame Header of Search Frame

name [Management Frame Header of Genre Search Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'DFSR'	a
2	4	4	N	Category and Matching Data Count - G (Number of Detailed Search Information Records)	=1	a
3	8	4	SWS	Size of Detailed Search Information Record	1)	a
4	12	4	D	Offset to Detailed Search Information Record	2)	a

- 1) This field describes the size of the detailed search information record. If there are two or more records, the records must have the same size (fixed length).
- 2) The displacement from the top of the search frame management frame to the first record of the sequence of detailed search information records is described, as it allows future expansion and manufacturer-specific data description.

11.A.2.5.1.2. Detailed Search Information Record

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	4	C	Data Declaration	'SRGN'	a
2	4	4	SWS	Expansion Field Size	1)	a
3	8	4	D	Offset to Expansion Field	1)	a
4	12	4	SWS	Category Definition Frame Size	2)	a
5	16	4	D	Category Definition Frame Address	3)	a
6	20	4	SWS	Category Data Frame Size	2)	a
7	24	4	D	Category Data Frame Address	3)	a
8	28	4	C	Default Keyboard Designation	'NORM'	a
9	32	4	SWS	Category Parent Record Size	4)	a
10	36	4	SWS	Category Option Record Size	5)	a
11	40	4	SWS	Size of the First-level Category Table	6)	a
12	44	4	N	Number of Option Items of First-level Category	6)	a
13	48	4	D	Offset to the First-level Category	6)	a
14	52	4	C	Keyboard Designation for First-level Category	'NORM'	a
15	56	4	SWS	Matching Data Definition Frame Size	2)	a
16	60	4	D	Matching Data Definition Frame Address	3)	a
17	64	4	SWS	Matching Data Frame Size	2)	a
18	68	4	D	Matching Data Frame Address	3)	a
19	72	4	SWS	Size of the Record of Matching Data Frame	7)	a
20	76	4	N	Total Number of the Records of Matching Data Frame	8)	a
21	80	4	N	Default POI Information Number	9)	a
22	84	4	SWS	Size of Next-level Data Frame	10)	a
23	88	4	D	Next-level Data Frame Address	10)	a
24	92	B1		Character Information Data List for Representation item	11)	a
25	O1	B2		A Sequence of Additional Frame Address(es) (#1 to #n)	1)	c
26	O2	B3		Expansion Field		c
27	O3	B4		Padding Field		c

Note: Positions of items 25 and 26 are optional in this detailed search information record because their areas can be determined by items 5, 7, 16, and 18. However, the detailed search information record size specified in the management frame header of the higher search frame must be satisfied by items 25 to 27.

1) Expansion Field Size and Offset

This field describes the displacement from the top of the detailed search information record to the top of the expansion field as the offset to the expansion field. Since this example does not have an expansion field, specify invalid values as the size and offset.

2) These fields describe the total size of the target data frame.

3) These fields describe the address of the target data frame in the representation format of 9) in Section 11.2.2.

4) This field describes the size of the category parent record.

Because the record length is variable, specify the maximum record size of the target data frame.

- 5) This field describes the size of a single category option record.

Because the record length is variable, specify the maximum record size of the target data frame.

- 6) Size, Number of Option Items, and Offset of First-level Category

These fields describe the size, number of option items, and displacement from the top of the category data frame, of the category table to be read first (which contains all the option items). For the second- and subsequent-level category tables, the record size, number of option items, and offset should be specified in the parent record of the actual data.

- 7) Size of the Record of Matching Data Frame

Since this example does not have an matching data frame, specify an invalid value.

- 8) Total Number of Records of Matching Data Frame

Since this example does not have an matching data frame, specify an invalid value.

- 9) Default POI Information Serial Number

This field describes the corresponding POI information number.

- 10) Next-level Data Frame Size and Address

Since this example does not have a next-level search frame, specify an invalid value.

- 11) Character Information Data List for Representation Item

This field describes a hierarchical search name, which is determined by the function specifications of the system.

ex) English; "SEARCH BY CATEGORY"

11.A.2.5.1.3. Category Data Definition Frame

No.	Usage	Description type	Description type declaration	Number of data items	Additional information	Comment	Remarks	Classification
1	'DCTF'	'REAL'	-	-	(14)	Definition Field Declaration		a
2	'JPTB'	'VRBL'	'UB'	'UW'	'ALAL'	Jump Table	1)	a
3	'SFTO'	'OFST'	'LG'	1	-	Offset to the Top of Option Record	2)	a
4	'SFBO'	'OFST'	'LG'	1	-	Offset to the End of Option Record	2)	a
5	'SEFG'	'NORM'	'UB'	2		Option Data Storage Flag		a
6	'SELN'	'NORM'	'LG'	1	-	Number of Option Items		a
7	'DCSF'	'REAL'	-	-	(8)	Option Record Definition Field Declaration		a
8	'BFRL'	'FDRL'	'UB'	1	-	Relation to the Top of the Previous Record Forward Relation from the Top of This Record		a

9	'NFRL'	'FDRL'	'UB'	1	-	Relation to the Top of the Following Record Backward Relation from the Top of This Record		a
10	'NXKD'	'NORM'	'UH'	1	-	Next-level Data Frame Type	3)	a
11	'NXFN'	'NORM'	'UH'	1	-	Next-level Data Frame Serial Number	3)	a
12	'NXST'	'OFST'	'LG'	1	-	Offset to Next-level Data Frame	4)	a
13	'NXSZ'	'NORM'	'LG'	1	-	Next-level Data Frame Size		a
14	'NXKB'	'NORM'	'SG'	1	-	Keyboard Designation for Next-level Data Frame	5)	c
15	'NAME'	'VRBL'	'CH'	'UB'	-	Name	6)	a

- 1) Jump tables are created in units of alphabetical characters.
- 2) The item represents the offset from the top of this category table to the first or last option record.
- 3) The items are stored as follows:

Category search level: NXKD = 1 (category) NXFN = 0 (invalid value)
Category end level: NXKD = 3 (POI information) NXFN = 0 (invalid value)

Association with POI information other than street address will be discussed.

- 4) This field describes the displacement from the top of the target data frame to the next-level data frame (category table/POI information record).
- 5) This field describes any of the following keyboards according to the contents of the next-level data frame (provisional):

'KBC2': Prefecture 'KBRT': Route name keyboard
'KBC2': Prefecture 'KBGC': Corporate group name or chain store name keyboard
'KBS2': Tourist spot item 1 'KBRT': Route name keyboard
- 6) The name is not multilingual. In the genre search, data items are arranged according to language-dependent keys. For multilingual representation, another search frame must be provided. (A language-independent sequence can be multilingual.)

11.A.2.5.1.4. Category Data Frame

name [Genre Search Category Data Frame]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	B1		A Sequence of Genre Search Category Tables		a

11.A.2.5.1.4.1. Category Table

name [Genre Search Category Table]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	B1		Genre Search Category Parent Record		a
2	4	B2		A Sequence of Genre Search Category Option(child) Records		a

Note: The category option records are placed in order of name. (provisional)

name [Genre Search Category Parent Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	2	NSWS	Jump Table Size		a
2	2	2	N;C;CC	Jump Key (#1)		c
3	4	4	D	Offset to Jump Option (#1)		c
4	6	2	N;C;CC	Jump Key (#2)		c
5	8	4	D	Offset to Jump Option (#2)		c
				:		
6	O1	2	N;C;CC	Jump Key (#n)		c
7	O2	4	D	Offset to Jump Option (#n)		c
8	O3	4	D	Offset to the Top of Option Record		a
9	O4	4	D	Offset to the End of Option Record		a
10	O5	2	B	Option Data Storage Flag		a
11	O6	4	N	Number of Option Items(child)		a
12	O7	B1	BR	Padding Field		c

name [Genre Search Category Option(child) Record]

No.	offset	Data length	Data type	Item name	Remarks	Classification
1	0	1	D	Relation to the Top of the Previous Record Forward Relation from the Top of This Record		a
2	1	1	D	Relation to the Top of the Following Record Backward Relation from the Top of This Record		a
3	2	1/2	N	Next-level Data Frame Type		a
4	2.5	1/2	N	Next-level Data Frame Serial Number		a
5	3	4	D	Offset to Next-level Data Frame		a
6	7	4	SWS	Next-level Data Frame Size		c
7	O1	4	N	Keyboard Designation for Next-level Data Frame		c
8	O2	B1	N:C	Name		a
9	O3	1	BR	Padding Field		c