

# **TAC KBP 2013 Slot Descriptions**

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**Linguistic Data Consortium**

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## Changes in this version:

1. The KBP evaluation year was added to the title of this document and the version number was reset to 1.0 to ease the tracking of changes within the course of an evaluation.
2. All instances of slot names were changed to the official slot names.
3. Section 2.4 was added to explain inverse slots, along with Section 2.5, a table of all entity-value slots and their inverses. Each entity-value slot also had its inverse listed in its slot description.
4. General considerations for entity types were added under Section 2.1
5. The definition of GPEs in Section 2.1 was clarified to indicate that top-level governments of GPEs should themselves be typed as GPEs, not as ORGs.
6. The per:employee\_of and per:member\_of slots were merged into a single slot, per:employee\_or\_member\_of. Language explaining the differences between the two slots has been removed.
7. per:country\_of\_birth, per:country\_of\_death, per:countries\_of\_residence
  - Areas of contention are valid fillers (e.g. Western Sahara).
  - City-states should be classified at the country level.
8. per:origin
  - Continental ethnic categories are acceptable responses.
  - Ethno-religious groups are not acceptable fillers.
9. per:title
  - Aristocratic titles are acceptable fillers, as are infix titles.
10. per:employee\_or\_member\_of
  - Organizations that have hired individuals as independent contractors are valid fillers.
11. org:alternate\_names
  - Shortened, indexical references to the assigned organization, such as “Association” for “American Psychiatric Association”, are not acceptable fillers.

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## 1 Introduction

Text Analysis Conference (TAC) is a series of workshops organized by the National Institute of Standards and Technology (NIST). TAC was developed to encourage research in natural language processing (NLP) and related applications by providing a large test collection, common evaluation procedures, and a forum for researchers to share their results. The Knowledge Base Population (KBP) track of TAC aims to develop systems that can determine whether or not specific entities already appear in existing knowledge bases, extract information about those entities from web and newswire texts, and use the extracted information to populate a new or existing knowledge base.

KBP uses a snapshot of Wikipedia as the existing knowledge base (KB) that systems and annotators scan for existing information and update with new information they obtain from source corpora. Wikipedia is an ideal KB because of its infoboxes, which consist of a list of attributes (slots) along with an answer (or filler) for each slot.

This document contains descriptions of the slots and fillers that apply to a number of different annotation tasks for TAC KBP, including Slot Filling, Temporal Slot Filling, and Cold Start. For more information on task-based specifics, see the separate guidelines for each task.

## 2 Slot Categorizations

The TAC KBP slots are primarily categorized as being either Person (PER) or Organization (ORG) slots based on the type of entities about which they seek to extract information. However, slots are also categorized by the content and quantity of their fillers.

### 2.1 Slot Content

Slots are labeled as Name, Value, or String based on the content of their fillers.

#### 2.1.1 Name slots

Name slots are required to be filled by the name of a person, organization, or geo-political entity (GPE). Be sure to review the individual slot descriptions in sections 3 and 4 for slot-specific considerations for person, organization, or GPE fillers. However, general considerations are listed below

- **Person Entities (PER)** – PERs are limited to individual humans. Groups of people (including families) are not valid person entities.
- **Organization Entities (ORG)** – ORGs are corporations, agencies, and other groups of people defined by an established organizational structure. Note that musical groups are considered to be organizations but individual artists (e.g. Brittany Spears) are considered persons. Programs or projects should not be considered organizations and different iterations of the same organization (e.g., the 111th U.S. Congress and the 112th U.S. Congress) should not be considered as distinct entities.
- **Geo-political Entities (GPE)** – Generally speaking, GPEs are composite entities comprised of a government, a physical location, and a population, with common

types including countries, states, provinces, counties, cities, and towns. Note, however, that for the purposes of TAC KBP, all top-level governments of GPEs should also be categorized as GPEs, not as ORGs.

Regions like “the southeast US” are not GPEs because, while they have the physical location and population qualities, they do not have their own government. Given the text “southeast Texas”, only “Texas” could be annotated as GPE, as southeast Texas has neither its own government nor a defined location.

### 2.1.2 Value Slots

Value slots are required to be filled by either a numerical value or a date. The numbers and dates in these fillers can be spelled out (forty-two; December 7, 1941) or written as numbers (42; 12/7/1941).

### 2.1.3 String Slots

String slots are basically a “catch all”, meaning that their fillers cannot be neatly classified as names or values. The text excerpts (or “strings”) that make up these fillers can sometimes be just a name, but are often expected to be more than a name.

## 2.2 Slot Quantity

Slots are labeled as Single-value or List-value based on the number of fillers they can take.

### 2.2.1 Single-value Slots

Single-value slots can have only a single filler. While most single-value slots are obvious (e.g., a person can only have one date of birth), some may be less apparent (see *per:age*).

### 2.2.2 List-value Slots

List-value slots can take multiple fillers as they are likely to have more than one correct answer in the source data. For example, people may have multiple children, employers, or alternate names.

## 2.3 Slots Table

The following table of all 41 slots and their categorizations is provided for reference:

Type	Slot Name	Content	Quantity
PER	per:alternate_names	Name	List
PER	per:children	Name	List
PER	per:cities_of_residence	Name	List
PER	per:city_of_birth	Name	Single
PER	per:city_of_death	Name	Single
PER	per:countries_of_residence	Name	List
PER	per:country_of_birth	Name	Single
PER	per:country_of_death	Name	Single
PER	per:employee_or_member_of	Name	List

PER	per:origin	Name	List
PER	per:other_family	Name	List
PER	per:parents	Name	List
PER	per:schools_attended	Name	List
PER	per:siblings	Name	List
PER	per:spouse	Name	List
PER	per:stateorprovince_of_birth	Name	Single
PER	per:stateorprovince_of_death	Name	Single
PER	per:statesorprovinces_of_residence	Name	List
PER	per:age	Value	Single
PER	per:date_of_birth	Value	Single
PER	per:date_of_death	Value	Single
PER	per:cause_of_death	String	Single
PER	per:charges	String	List
PER	per:religion	String	Single
PER	per:title	String	List
ORG	org:alternate_names	Name	List
ORG	org:city_of_headquarters	Name	Single
ORG	org:country_of_headquarters	Name	Single
ORG	org:founded_by	Name	List
ORG	org:member_of	Name	List
ORG	org:members	Name	List
ORG	org:parents	Name	List
ORG	org:political_religious_affiliation	Name	List
ORG	org:shareholders	Name	List
ORG	org:stateorprovince_of_headquarters	Name	Single
ORG	org:subsidiaries	Name	List
ORG	org:top_members_employees	Name	List
ORG	org:date_dissolved	Value	Single
ORG	org:date_founded	Value	Single
ORG	org:number_of_employees_members	Value	Single
ORG	org:website	String	Single

## 2.4 Inverse Slots

Slot Filling defines 41 slots. Of these, 26 are entity-value slots: slots that require fillers that are themselves entities (ORG, PER, or GPE). Each entity-value slot has an inverse. Some slots, such as per:siblings, are symmetric. Others, such as per:parents, have inverses that are already Slot Filling task slots (in this case, per:children). The remaining slots (e.g. org:founded\_by) have no corresponding slot in the Slot Filling task; Cold Start specifies new slot names for these inverses. All such newly-introduced slots are list-value slots.

## 2.5 Inverse Slots Table

The following table lists all entity-value slots and their corresponding inverse slots, for use in Cold Start. Slots with asterisks represent relations that are defined specifically for Cold Start.

Slot	Inverse(s)
per:children	per:parents
per:other_family	per:other_family
per:parents	per:children
per:siblings	per:siblings
per:spouse	per:spouse
per:employee_or_member_of	{org,gpe}:employees_or_members*
per:schools_attended	org:students*
per:city_of_birth	gpe:births_in_city*
per:stateorprovince_of_birth	gpe:births_in_stateorprovince*
per:country_of_birth	gpe:births_in_country*
per:cities_of_residence	gpe:residents_of_city*
per:statesorprovinces_of_residence	gpe:residents_of_stateorprovince*
per:countries_of_residence	gpe:residents_of_country*
per:city_of_death	gpe:deaths_in_city*
per:stateorprovince_of_death	gpe:deaths_in_stateorprovince*
per:country_of_death	gpe:deaths_in_country*
org:shareholders	{per,org,gpe}:holds_shares_in*
org:founded_by	{per,org,gpe}:organizations_founded*
org:top_members_employees	per:top_member_employee_of*
org:member_of	org:members
org:members	{org,gpe}:member_of
org:parents	{org,gpe}:subsidiaries
org:subsidiaries	org:parents
org:city_of_headquarters	gpe:headquarters_in_city*
org:stateorprovince_of_headquarters	gpe:headquarters_in_stateorprovince*
org:country_of_headquarters	gpe:headquarters_in_country*

## 3 Person Slots

Note that future, hypothetical, fictional, and metaphorical fillers are incorrect for **ALL** of the following person slots. Former fillers are valid responses for most slots but you should check the description of each to be sure.

### 3.1 per:alternate\_names

**Content:** Name

**Quantity:** List

**Description:** Names used to refer to the assigned person that are distinct from the "official" name (the namestring for your entity appearing at the top of the annotation or assessment)

tool). Alternate names may include aliases, stage names, alternate transliterations, abbreviations, alternate spellings, nicknames, or birth names.

**Inverse Slot:** n/a

- Alternate names must be used separately in the document in order to be correct (“Barack Hussein” from document text “Barack Hussein Obama” would be wrong unless “Barack Hussein” was also used by itself in the document).
- Compared with other slots, more inference can be used when selecting fillers for *per:alternate\_names* because entities' canonical names will often be absent from source documents.
- Generally, a given (first) name alone is not a correct alternate name unless the person is unambiguously known that way (e.g., ‘the Donald’ for Donald Trump, or ‘Oprah’ for Oprah Winfrey, but not ‘John’ for ‘John Smith’).
- A last name alone is not a valid alternate name.
- Titles or other extraneous information added to a name do not justify an alternate name (e.g. “Sen. Barbara Boxer” is not a valid alternate name for “Barbara Boxer”).
- Differing punctuation does not make a name distinct (e.g. “John Q Adams” in a list that already contains “John Q. Adams” is **not** valid). Also, for personal names, initials are considered equivalent to the fully spelled out names (Jonathan David Smith and Jonathan D. Smith would be equivalent).
- Combinations of first and middle names are considered as different from first and last name combinations (“Barack Hussein” is different from “Barack Obama”).
- Former alternate names are also correct as long as the source document indicates that the name was used at some time in the past.

Entity	Document Context	Correct Filler
Abdurrahman Wahid	Wahid, also known as Gus Dur	Gus Dur
Rudolf Wanderone	Rudolf Walter Wanderone, Jr. was an American professional pocket billiards player, best known as "Minnesota Fats"	Minnesota Fats
Bob Wilson	Bob Wilson's middle name really is Primrose. But his parents weren't really being that cruel - apparently it's a Scottish tradition to pass on a mother's maiden name as a middle name, and he was unlucky enough to be the son of a Miss Primrose.	Bob Primrose Wilson
Hillary Clinton	Secretary of State Hilary Clinton	Hilary Clinton
Roy Scheider	Roy Scheider, the actor best known for his role in 'Jaws,' has died. Scheider died Sunday...	N/A

### 3.2 per:date\_of\_birth

**Content:** Value

**Quantity:** Single

**Description:** The date on which the assigned person was born.

**Inverse Slot:** n/a

- Note the distinction between birthdays and birthdates for an individual. A full date (i.e. day, month, and year) listed as someone’s birthday might only provide information on the day and month on which they were born, not the correct year (see Augustus II the Strong example below).



Entity	Document Context	Correct Filler
Hank Williams	the Jan. 1 anniversary of Williams' death, and on his Sept. 17 birthday.	Sept. 17 <i>Norm: XXXX-09-17</i>
Augustus II the Strong	It was written to celebrate the birthday of King Augustus II the Strong and was performed for him on his birthday, May 12, 1727, on the Marktplatz of Leipzig	May 12 <i>Norm: XXXX-05-12</i>

### 3.3 per:age

**Content:** Value

**Quantity:** Single

**Description:** A reported age of the assigned person.

**Inverse Slot:** n/a

- Age of the person at death is an acceptable answer.
- Previous ages are valid responses.
- Approximate ages are valid responses. For example, if a source document states that the assigned person was “about 50”, then “50” would be a valid filler.
- During the Slot Filling Task, responses for *per:age* must be explicitly mentioned in the document; annotators cannot calculate ages.
- Although this is a single-value slot, annotators and systems are not required to find the most recent age mentioned in the source documents.

Entity	Document Context	Correct Filler
Megawati Sukarnoputri	“Today is a day of tragedy for democracy,” Megawati, 49, told her supporters before the demonstration in Jakarta.	49
Michael Jackson	Michael Jackson died June 25 2009 at the age of 50.	50
Tom Lehman	Nor Tom Lehman, who turned fifty last month	fifty <i>Norm: 50</i>

### 3.4 per:country\_of\_birth

**Content:** Name

**Quantity:** Single

**Description:** The country in which the assigned person was born.

**Inverse Slot:** *gpe:births\_in\_country\**

- During the Assessment task, adjectival forms (e.g. Canadian) are acceptable responses for this slot. However, in the slot-filling task, annotators should edit adjectival text strings to match the appropriate countries.
- Note that a person’s stated nationality cannot be used to infer country of birth (for appropriate placement of information about a person’s nationality, see *per:origin*)
- Geographical areas of contention are valid fillers (e.g. Palestine, Taiwan, Western Sahara).
- City-states (e.g. Vatican City, Singapore) should be classified at the country level.

Entity	Document Context	Correct Filler
Abu Musab Al-Zarqawi	Al-Zarqawi, the Jordanian-born militant...	Jordanian <i>Norm: Jordan</i>

Martin Burnham	..for the kidnapping last year of Americans Martin and Gracia Burnham and Guillermo Sobero.	N/A
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### 3.5 per:stateorprovince\_of\_birth

**Content:** Name

**Quantity:** Single

**Description:** The geopolitical entity at state or province level in which the assigned person was born. This slot must be filled with the name of a state or province.

**Inverse Slot:** *gpe:births\_in\_stateorprovince\**

- Capitol districts (e.g. Washington D.C.), emirates (e.g. Dubai), and British counties should be classified at the state or province level (you should use an Internet search to clarify any uncertainties about foreign government systems).

Entity	Document Context	Correct Filler
Stephen Harper	Harper, born in April of 1959 in Toronto, Ontario	Ontario
Stephen Harper	Harper was born in Toronto in April 1959. Toronto, Ontario is a beautiful city.	Ontario
Stephen Harper	Harper was born in Toronto in April 1959.	N/A
Stephen Harper	Harper, a Toronto, Ontario native	N/A

### 3.6 per:city\_of\_birth

**Content:** Name

**Quantity:** Single

**Description:** The geopolitical entity at the municipality level (city, town, or village) in which the assigned person was born. This slot must be filled with the name of a city, town, or village.

**Inverse Slot:** *gpe:births\_in\_city\**

- Hong Kong, Macau, Gaza, and Jewish settlements should be classified as cities.
- Capitol Districts (e.g. Washington D.C.) should **not** be classified at the city level, rather they should be classified at the state or province level.
- GPEs below the city level (e.g. 5 boroughs of New York City) are **not** valid fillers.
- City-states (e.g. Vatican City, Singapore) should be classified at the country level.

Entity	Document Context	Correct Filler
Hank Williams	Williams lived in Georgiana in the mid 1930's with his mother, Lillie, and his sister, Irene, after his birth in Mount Olive West	Mount Olive West
Tom Lehman	Lehman was born in Austin, Minnesota but ...	Austin

### 3.7 per:origin

**Content:** Name

**Quantity:** List

**Description:** The nationality and/or ethnicity of the assigned person.

**Inverse Slot:** n/a

- Former nationalities are acceptable responses.

- When both nationality and ethnicity are mentioned in source documents, both are valid answers. For example, if a document states that the assigned person “is a Chinese American”, both “Chinese” and “American” would be correct fillers.
- If country of birth is stated, nationality can be inferred unless specifically stated otherwise (such as "Egyptian-born Canadian").
- For Assessment purposes, names of countries are acceptable responses. However, during the Slot Filling task, annotators should edit text to the adjectival form.
- Continental ethnic categories are acceptable responses (e.g. “African”).
- Ethno-religious groups (e.g. “Jewish”) are not acceptable fillers. Use *per:religion* instead.

Entity	Document Context	Correct Filler
Carla Del Ponte	Del Ponte, a Swiss citizen	Swiss
Zacarias Moussaoui	Frenchman Zacarias Moussaoui	Frenchman <i>Norm:</i> French
Pascal Yoadimnadjji	African leader Pascal Yoadimnadjji died Friday.	African

### 3.8 per:date\_of\_death

**Content:** Value

**Quantity:** Single

**Description:** The date of the assigned person’s death.

**Inverse Slot:** n/a

Entity	Document Context	Correct Filler
Hank Williams	But Williams never played the Opry again. At age 29, while on the way to a concert in Canton, Ohio, he was found dead in the back seat of his Cadillac on New Year's Day 1953.	New Year's Day 1953 <i>Norm:</i> 1953-01-01
Ahmed Shah Massoud	Massoud is a brother of Ahmed Shah Massoud, the legendary resistance fighter in northern Afghanistan who was assassinated by operatives of al-Qaida in September 2001.	September 2001 <i>Norm:</i> 2001-09-XX

### 3.9 per:country\_of\_death

**Content:** Name

**Quantity:** Single

**Description:** The country in which the assigned person died. This slot must be filled with the name of a country.

**Inverse Slot:** *gpe:deaths\_in\_country\**

- Geographical areas of contention are valid fillers (e.g. Palestine, Taiwan, Western Sahara).
- City-states (e.g. Vatican City, Singapore) should be classified at the country level.

Entity	Document Context	Correct Filler
Ahmed Said Khadr	Ahmed Said Khadr, an Egyptian-born Canadian, who was killed last October in the South Waziristan region of Pakistan.	Pakistan
Mohammed Khan	Khan was killed in the North West Frontier Province	N/A

Mohammed Khan	Khan was killed in North West Frontier Province... NWFP is located in Pakistan	Pakistan
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### 3.10 per:stateorprovince\_of\_death

**Content:** Name

**Quantity:** Single

**Description:** The geopolitical entity at state or province level in which the assigned person died. This slot must be filled with a state or province name.

**Inverse Slot:** *gpe:deaths\_in\_stateorprovince\**

- Capitol districts (e.g. Washington D.C.), emirates (e.g. Dubai), and British counties should be classified at the state or province level (you should use an Internet search to clarify any uncertainties about foreign government systems).

Entity	Document Context	Correct Filler
Ahmed Said Khadr	Ahmed Said Khadr, an Egyptian-born Canadian, who was killed last October in the South Waziristan region of Pakistan.	N/A
Mohammed Khan	Khan was killed in the North West Frontier Province	North West Frontier Province
Jay Smith	Smith died in Austin, Texas	Texas

### 3.11 per:city\_of\_death

**Content:** Name

**Quantity:** Single

**Description:** The geopolitical entity at the level of city, town, village in which the assigned person died. This slot must be filled with a city, town, or village name.

**Inverse Slot:** *gpe:deaths\_in\_city\**

- Hong Kong, Macau, Gaza, and Jewish settlements should be classified as cities.
- Capitol Districts (e.g. Washington D.C.) should **not** be classified at the city level, rather they should be classified at the state or province level.
- GPEs below the city level (e.g. 5 boroughs of New York City) are **not** valid fillers.
- City-states (e.g. Vatican City, Singapore) should be classified at the country level.

Entity	Document Context	Correct Filler
Ahmed Said Khadr	Ahmed Said Khadr, an Egyptian-born Canadian, who was killed last October in the South Waziristan region of Pakistan.	N/A
Mohammed Khan	Khan was killed in the North West Frontier Province	N/A
Jay Smith	Smith died in Wilkes-Barre General Hospital	Wilkes-Barre

### 3.12 per:cause\_of\_death

**Content:** String

**Quantity:** Single

**Description:** The explicit cause of death for the assigned person.

**Inverse Slot:** n/a

- A mention of a serious illness is not an acceptable filler unless it is explicitly linked to the death of the assigned person in the document.
- Assessors should be lenient in their judgment of the fullness of selected strings for *per:cause\_of\_death* (in the Roy Scheider example below, “complications” or “staph infection” would be acceptable answers, though not preferred).

Entity	Document Context	Correct Filler
Hank Williams	The coroner's report said Williams died of a ``heart condition and hemorrhaging,'	heart condition and hemorrhaging
Marilyn French	Author Marilyn French, 79, passed away of heart failure on May 2, 2009, in New York City	heart failure
Roy Scheider	Scheider had suffered from multiple myeloma for several years, and died of complications from a staph infection	complications from a staph infection

### 3.13 *per:countries\_of\_residence*

**Content:** Name

**Quantity:** List

**Description:** All countries in which the assigned person has lived.

**Inverse Slot:** *gpe:residents\_of\_country\**

- Use caution when selecting *per:origin* fillers for use as countries of residence. While a person’s national background can often justify residence, one’s ethnic background cannot.
- Former countries of residence are correct responses.
- Residence must be lexically supported in source documents (e.g., “home”, “house”, “resides”, “grew up”, etc.) but there is no duration standard to define residence.
- Prison stays and similar legal holdings can support residence fillers.
- Vacation homes can support residence fillers as long as it is clear the residence is owned by the entity and is not just a rental.
- Although annotators cannot generally infer a person’s country of residence from the location of his or her employer, national-level government employees or valid candidates for such positions are an exception to this rule (e.g., "U.S. Senator Jesse Helms" and "Former Indian Prime Minister V.P. Singh" could be said to have resided in, respectively, the U.S. and India).
- Geographical areas of contention are valid fillers (e.g. Palestine, Taiwan, Western Sahara).
- City-states (e.g. Vatican City, Singapore) should be classified at the country level.

Entity	Document Context	Correct Filler
Paavo Nurmi	Finland's Nurmi won his nine golds in the 1920's.	Finland
Jon Wong	Surveillance cameras show a Chinese man, later identified as Jon Wong, leaving the White House	N/A
Abdurrahman Wahid	Abdurrahman returned to his house in Cilandak, Indonesia	Indonesia
Al Gore	The Gore family resides in Nashville, Tennessee	N/A

Remy Smith	A judge in New York City said Remy Ma, whose real name is Remy Smith, could not leave the United States for a five-country European concert tour.	United States
Mohammad Baqer Qalibaf	"... said Qalibaf, who succeeded President Mahmoud Ahmadinejad as mayor after losing in Iran's 2005 presidential race.	Iran
Ehud Barak	Israeli Defense Minister and Labour party chairman Ehud Barak on Wednesday demanded...	Israeli <i>Norm: Israel</i>

### 3.14 per:statesorprovinces\_of\_residence

**Content:** Name

**Quantity:** List

**Description:** Geopolitical entities at the state or province level in which the assigned person has lived. This slot must be filled with state or province names.

**Inverse Slot:** *gpe:residents\_of\_stateorprovince\**

- Former states or provinces of residence are correct responses.
- Residence must be lexically supported in source documents (e.g., “home”, “house”, “resides”, “grew up”, etc.) but there is no duration standard to define residence.
- Capitol districts (e.g. Washington D.C.), emirates (e.g. Dubai), and British counties should be classified at the state or province level (you should use an Internet search to clarify any uncertainties about foreign government systems).
- Prison stays and similar legal holdings can support residence fillers.
- Vacation homes can support residence fillers as long as it is clear the residence is owned by the entity and is not just a rental.
- Although annotators cannot generally infer a person’s residence from his or her place of employment, U.S. senators and representatives are exceptions to this rule because they are constitutionally required to have lived in the states they represent.
- Without other supporting language, birthplace is not sufficient to justify residence. (see Roy Scheider example below for an exception based on other supporting language).

Entity	Document Context	Correct Filler
Abdurrahman Wahid	Abdurrahman returned to his house in Cilandak, Indonesia	N/A
Al Gore	The Gore family resides in Nashville, Tennessee	Tennessee
George W. Bush	US President George W. Bush will meet his French counterpart Nicolas Sarkozy on Saturday at the Bush family's summer home in Kennebunkport, Maine,	Maine
Roy Scheider	Born into a working class family in Orange, New Jersey, Roy Scheider...	New Jersey

### 3.15 per:cities\_of\_residence

**Content:** Name

**Quantity:** List

**Description:** Geopolitical entities at the level of city, town, or village in which the assigned person has lived. This slot must be filled with the name of a city, town, or village.

**Inverse Slot:** *gpe:residents\_of\_city\**

- Former cities of residence are correct responses.
- Residence must be lexically supported in source documents (e.g., “home”, “house”, “resides”, “grew up”, etc.) but there is no duration standard to define residence.
- Prison stays and similar legal holdings can support residence fillers.
- Vacation homes can support residence fillers as long as it is clear the residence is owned by the entity and is not just a rental.
- Hong Kong, Macau, Gaza, and Jewish settlements should be classified as cities.
- Capitol Districts (e.g. Washington D.C.) should **not** be classified at the city level, rather they should be classified at the state or province level.
- Note that proof of employment in a city does **not** justify a residence filler.
- Without other supporting language, birthplace is not sufficient to justify residence. (see Roy Scheider example below for an exception based on other supporting language).
- Unlike countries and states of residence, top-level government employees of cities cannot be inferred to reside in their respective GPEs.
- GPEs below the city level (e.g. 5 boroughs of New York City) are not acceptable answers.
- City-states (e.g. Vatican City, Singapore) should be classified at the country level.

Entity	Document Context	Correct Filler
Abdurrahman Wahid	Abdurrahman returned to his house in Cilandak, Indonesia	N/A
Al Gore	The Gore family resides in Nashville, Tennessee	Nashville
George W. Bush	US President George W. Bush will meet his French counterpart Nicolas Sarkozy on Saturday at the Bush family's summer home in Kennebunkport, Maine,	Kennebunkport
Rudy Giuliani	Former New York City mayor Rudy Giuliani said...	N/A
Roy Scheider	Born into a working class family in Orange, New Jersey, Roy Scheider...	Orange
Roy Scheider	Scheider lived in Sag Harbor, NY...	Sag Harbor

### 3.16 per:schools\_attended

**Content:** Name

**Quantity:** List

**Description:** Any school (college, high school, university, etc.) that the assigned person has attended.

**Inverse Slot:** org:students\*

- Enrollment at a school does not justify a filler for this slot; there must be evidence in the document that the person actually attended the school.

Entity	Document Context	Correct Filler
Roy Lubove	Lubove was born in Queens, N.Y., and graduated from Columbia College in 1956. He earned his doctorate at Cornell University in 1960, and joined the faculty at Harvard that year.	Columbia College; Cornell University

Tom Lehman	He attended the University of Minnesota, graduating with a degree in Business/Accounting and turned professional in 1982.	University of Minnesota
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### 3.17 per:title

**Content:** String

**Quantity:** List

**Description:** Official or unofficial name(s) of the employment or membership positions that have been held by the assigned person.

**Inverse Slot:** n/a

- Generic professions such as ‘doctor’ or ‘lawyer’, are acceptable answers, but if more specific titles within those professions such as ‘Chief Neurosurgeon’ or ‘Associate Partner’ are mentioned in the document, those more specific versions are preferred (and ‘doctor’ or ‘lawyer’ would be considered inexact).
- Extremely generic/vague position names within an organization such as “senior leader” or “member” are not acceptable answers. However, absent any more descriptive information, vague profession-like titles are acceptable (see examples below for Frankie Delgado and Bryan Fuller).
- Unofficial or metaphorical titles that do not refer to an employment or membership position, (such as “hero” or “socialite”) are not acceptable fillers.
- Although “founder” does not justify a *per:employee\_or\_member\_of* filler, it is a valid title.
- The name of the person’s employer should not be included as part of the title, so ‘reporter with the LA Times’ and ‘reporter for the Sacramento Union’ would be inexact -- the answer in these cases should be simply ‘reporter’.
- In selecting modifiers to include in title fillers, a general rule is to include them if they describe positions within organizations (e.g., “record producer”, “defense chief”, “advertising account manager”, and “executive producer”) and exclude them if they do not (e.g., text excerpts “talent show judge”, “rookie driver”, “meteorology professor”, and “LGBT activist” would produce the fillers “judge”, “driver”, “professor”, and “activist”).
- Some titles will be very specific to the organizations that bestow them and, therefore, seem strange out of context. However, these titles are correct fillers (see the examples below for Kendra Wilkinson, Simon Cowell, and Jake Pavelka).
- Positions on a sports team (short stop, quarterback, center) are considered titles for professional athletes.
- Aristocratic titles (e.g. “Duchess”, “King”) are acceptable fillers, as are infixed titles (e.g. “Lord” in “Alfred Lord Tennyson”).

Entity	Document Context	Correct Filler
Kofi Annan	United Nations Secretary General Kofi Annan	Secretary General
Carla Del Ponte	Del Ponte, a Swiss citizen, was elected as its prosecutor in September 1999 for a four-year period which is up for renewal.	prosecutor
Tom Lehman	Thomas Edward Lehman is an American professional golfer.	golfer
Mia Kirshner	Mia Kirshner, star of “the L Word”	Star
Kendra Wilkinson	Wearing a white veil and surrounded by her girlfriends, the former Playboy bunny looked to...	bunny
Simon Cowell	The American Idol judge is donating a day's pay to Idol Gives Back, PEOPLE has confirmed.	judge



Jake Pavelka	ABC announces an All Star cast on Dancing with the Stars including Bachelor Jake Pavelka.	Bachelor
George Boyd	it is likely that Boyd will be a Nottingham Forest player at the end of the season as the two clubs are believed to have agreed on a fee for the winger.	winger
Frankie Delgado	Frankie Delgado is an American musician and television personality known for his appearances on the reality series.	musician, television personality
Bryan Fuller	The episode of was written by series creator Bryan Fuller.	series creator
Alberto Gonzales	Gonzales, an architect of contentious US 'war on terror' legal tactics...	N/A
Fredrik Reinfeldt	Persson served as Sweden's premier for 10 years, but stepped down in October 2006 after his party was ousted by a center-right coalition led by Fredrik Reinfeldt.	premier

### 3.18 per:employee\_or\_member\_of

**Content:** Name

**Quantity:** List

**Description:** The organizations or geopolitical entities (governments) of which the assigned person has been an employee or member.

**Inverse Slot:** {org,gpe}:employees\_or\_members\*

- Programs or projects should not be considered organizations and different iterations of the same organization (e.g., the 111<sup>th</sup> U.S. Congress and the 112<sup>th</sup> U.S. Congress) should not be considered as distinct entities.
- Government officials at the top level of government (Supreme Court, Department/Ministry heads) and military personnel should be considered employees/members of their countries as well as employees/members of their respective government or military bodies. Government employees in lower departments (e.g. CIA, Centers for Disease Control) should be employees/members of those organizations only. Note that, with respect to this rule, the European Union and other “countries of countries” should be categorized as a country.
- The title of “Fellow” can be used as justification for membership.
- People can sometimes become members of an organization posthumously (such as halls of fame).
- Actors, directors, screenwriters, etc. should not be considered employees/members of TV shows or movies in which they appeared or helped to produce. However, they should be considered as employees of networks/companies that produced such works.
- Organizations of which the assigned person was formerly, but no longer, an employee or member are correct slot fillers.
- Although employment generally means that individuals have received payment from organizations, unpaid internships and volunteer positions would also fall into this category.
- Organizations that have hired individuals as independent contractors are valid fillers for *per:employee\_or\_member\_of*.
- Organizations of which the assigned entity is a founder or owner with *no other* position/relationship are not acceptable answers.
- Employees/members of subsidiary organizations are not considered employees/members of the respective parent organizations (e.g. if the assigned entity were an annotator at

LDC, “UPenn” would not be a valid filler for *per:employee\_or\_member\_of*). See *org:subsidiaries* and *org:parents* for more details about these types of organizations.

Entity	Document Context	Correct Filler
Hillary Clinton	Newly-appointed US Secretary of State Hillary Clinton has been greeted warmly by State Department employees	State Department
Muhammad Assessorsssef al-Najjar	Mohammed Najjar, a senior leader of the PLO's Black September unit that carried out a number of terrorist attacks.	Black September
Tom Lehman	He played on the PGA Tour with little success from 1983 to 1985, and was then obliged to play elsewhere for the following six seasons. [...] He regained his PGA Tour [...] and has enjoyed unbroken membership of the PGA Tour since 1992.	PGA Tour
David Petraeus	Gen. David Petraeus, U.S. Army general, said...	Army
Romano Prodi	Prodi was president of the EU's European Commission from September 1999 to October 2005.	European Commission
Ronnie Lott	Lott was known for his toughness and was inducted into the Pro Football Hall of Fame in 2000.	Pro Football Hall of Fame
Samuel Alito	Supreme Court justice Samuel Alito	Supreme Court
Donald Wildmon	American Family Association Founder and Chairman: The Rev. Donald Wildmon	American Family Association
Alberto Gonzales	Sampson told the committee that Gonzales, who leads the Department of Justice, was involved.	Department of Justice
Mostafa Mohammad-Najjar	Iranian Defense Minister Mostafa Mohammad Najjar	Iran
Ashraf Al-Sayed Assessorsb	He works as an owner and manager of Betra Balad firm for building and contracting investments	Betra Balad
Robert Menendez	U.S. Senator for New Jersey Robert Menendez...	U.S., New Jersey
Brian Fuller	Brian Fuller, creator of the critically-acclaimed new ABC series "Pushing Daisies"...	ABC
David Petraeus	Gen. David Petraeus, U.S. Army general, said...	U.S.
Romano Prodi	Prodi was president of the EU's European Commission from September 1999 to October 2005.	EU
Justin Theroux	Directed by Ben Stiller; written by Justin Theroux, Stiller and Ethan Cohen, based on a story by Stiller and Theroux; released by DreamWorks Pictures...	DreamWorks Pictures
Jacob Zuma	Jacob Zuma, new leader of South Africa's governing party, says business and labor will together 'find workable solutions.'	South Africa
Abdul Rahim Noor	Others on the list are Daim, Malaysia's police chief Abdul Rahim Noor...	Malaysia

### 3.19 *per:religion*

**Content:** String

**Quantity:** Single

**Description:** The religion to which the assigned person has belonged.

**Inverse Slot:** n/a

- Former religions are acceptable answers.
- Ethno-religious groups (Judaism) should always be annotated as *per:religion* (as opposed to *per:origin*).

Entity	Document Context	Correct Filler
Abubakar Abdurajak Janjalani	Afghan-trained Muslim firebrand Abubakar Abdurajak Janjalani	Muslim
Tom Lehman	the entire Ryder Cup leadership – Tom Lehman, Corey Pavin and Loren Roberts – are self-professed born-again Christians.	Christians <i>Norm: Christian</i>

### 3.20 per:spouse

**Content:** Name

**Quantity:** List

**Description:** The spouse(s) of the assigned person.

**Inverse Slot:** *per:spouse*

- Former spouses are acceptable answers.
- Marriages do not have to be legally recognized in order for resulting spouses to be correct fillers. However, the word “partner”, by itself, does not justify a *per:spouse* filler (it must be coupled with a word like “marriage”, “husband”, “wife”, etc.)

Entity	Document Context	Correct Filler
Hank Williams	Williams’ wife at the time of his death, Billie Jean Jones	Billie Jean Jones
Hyman Rickover	And the latest lady to take up the cudgels for her husband via a newspaper interview was Mrs. Ruth Rickover. She is the wife of Rear Adm. Hyman G. Rickover	Ruth Rickover

### 3.21 per:children

**Content:** Name

**Quantity:** List

**Description:** The children of the assigned person, including adopted and step-children.

**Inverse Slot:** *per:parents*

Entity	Document Context	Correct Filler
Hank Williams	Williams’ son, Hank Williams Jr.	Hank Williams Jr.
Hank Williams Jr.	Jr.’s youngest child, Katie Williams	Katie Williams

### 3.22 per:parents

**Content:** Name

**Quantity:** List

**Description:** The parents of the assigned person. In addition to biological parents, step-parents and adoptive parents are also acceptable answers.

**Inverse Slot:** *per:children*

Entity	Document Context	Correct Filler
Hank Williams	Hank lived in Georgiana in the mid 1930’s with his mother, Lillie Williams	Lillie Williams
Megawati Sukarnoputri	Roping in Guruh would have helped the government party counter to some extent Megawati’s popularity, which largely stems from the reverence that millions of Indonesians have for her father, Indonesia’s first post-independence president, Sukarno	Sukarno

### 3.23 per:siblings

**Content:** Name

**Quantity:** List

**Description:** The brothers and sisters of the assigned person.

**Inverse Slot:** *per:siblings*

- In addition to full siblings, step-siblings and half-siblings are acceptable answers.
- Brothers- or sisters-in-law are not acceptable responses for *per:siblings* (they are fillers for *per:other\_family*).

Entity	Document Context	Correct Filler
Ahmed Wali Massoud	Massoud is a brother of Ahmed Shah Massoud, the legendary resistance fighter in northern Afghanistan who was assassinated by operatives of al-Qaida in September 2001. On Wednesday another brother of the late commander, Ahmed Wali Massoud, who had not previously endorsed any candidate, said he supported Karzai's election	Ahmed Shah Massoud
Elizabeth Blackwell	Unable to get a post in American hospitals, Blackwell, her sister Emily and friend Dr Marie Zakrzewaska started their own hospital, the New York Infirmary for Indigent Women and Children.	Emily

### 3.24 per:other\_family

**Content:** Name

**Quantity:** List

**Description:** Family other than siblings, parents, children, and spouse (or former spouse). Correct fillers for this slot include brothers-in-law, sisters-in-law, grandparents, grandchildren, cousins, aunts, uncles, etc.

**Inverse Slot:** *per:other\_family*

Entity	Document Context	Correct Filler
Hank Williams	Williams' son, Hank Williams Jr., and grandson, Hank Williams III	Hank Williams III
Khalid Sheikh Mohammed	Like his nephew Ramzi Youssef, who orchestrated the 1993 World Trade Center bombing, Mohammed grew up in Kuwait	Ramzi Youssef

### 3.25 per:charges

**Content:** String

**Quantity:** List

**Description:** The charges or crimes (alleged or convicted) of the assigned person.

**Inverse Slot:** n/a

- If multiple incidents involve the same charge (e.g., 'driving under the influence of alcohol'), the charge should only be listed once.
- Only violations of the laws of a GPE are acceptable as fillers for *per:charges*. Charges that result from violations of organizations' rules (such as sports teams) are not acceptable.
- Correct responses must be actual charges, not punishments for charges. Therefore, while "robbery" would be an acceptable filler for *per:charges*, "5 years in prison" would not.

Entity	Document Context	Correct Filler
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Abdurrahman Wahid	President Abdurrahman Wahid, a step that could lead to his impeachment over alleged involvement in two corruption scandals	corruption
Uri Kelman	Alleged Mossad agents, Uri Kelman and Eli Cara, were convicted last year of trying to fraudulently obtain New Zealand passports. They were deported in September after serving two months of their six-month prison sentences.	trying to fraudulently obtain New Zealand passports

## 4 Organization Slots

As with person slots, future, hypothetical, fictional, and metaphorical fillers are incorrect for **ALL** of the following organization slots. Former fillers are valid responses for most slots but you should check the description of each to be sure.

### 4.1 org:alternate\_names

**Content:** Name

**Quantity:** List

**Description:** Any name used to refer to the assigned organization that is distinct from the "official" name (the namestring for your entity appearing at the top of the annotation or assessment tool). Alternate names may include former names, aliases, alternate spellings, acronyms, abbreviations, translations or transliterations of names, and any official designators such as stock ticker code or airline call sign.

**Inverse Slot:** n/a

- Alternate names must be used as names by themselves in the document in order to be correct ("Shenyang Aircraft" from document text "Shenyang Aircraft Corp." would be wrong unless "Shenyang Aircraft" was also used by itself in the document).
- Compared with other slots, more inference can be used when selecting fillers for *org:alternate\_names* because entities' canonical names will often be absent from source documents (see Philadelphia Inquirer example below).
- An organization's official name plus "Corporation" or the abbreviation is a correct alternate name (if "Samsung" is the official name, "Samsung Corp." would be a correct alternate).
- Differing punctuation does not make a name distinct (e.g. adding "C.D.C." to a list that already contains "CDC" is *not* valid).
- Additionally, although abbreviations of full names should be considered different from a full name (e.g., "UAW" is not equivalent to "United Auto Workers"), a standard abbreviation of a name component should be considered the same as the non-abbreviated form (e.g., "Shenyang Aircraft Corporation" is equivalent to "Shenyang Aircraft Corp.").
- Absent other supporting information, the word "predecessor" cannot be used to infer a former name as it could refer to a completely distinct entity.
- Shortened, indexical references (not to be confused with abbreviations) to the assigned organization, such as "Association" for "American Psychiatric Association", are not acceptable fillers.

Entity	Document Context	Correct Filler
Harkat-ul-Mujahideen	Harkat-ul-Mujahideen, or Movement of Holy Warriors	Movement of Holy Warriors

Médecins Sans Frontières	The organization is known in most of the world by its French name or simply as MSF, but in the United States and Canada the name Doctors Without Borders is often used instead.	MSF; Doctors Without Borders
Philadelphia Inquirer	By Susan Snyder, PhillyInquirer Staff Writer [No appearance of "Philadelphia Inquirer" in the source document]	PhillyInquirer
Paris Opéra	The 1,680 permanent staff of the Opera have one of the oldest pension systems in France, created in 1698 by Louis XIV for the Opera's predecessor the Royal Academy of Music.	N/A

## 4.2 org:political\_religious\_affiliation

**Content:** Name

**Quantity:** List

**Description:** Ideological groups with which the organization is associated.

**Inverse Slot:** n/a

- If an organization is clearly a member of another political or religious organization, it is an appropriate answer for *org:member\_of* and should not be used for *org:political\_religious\_affiliation*. However, religions generally do not have an official central organization associated with them and so are usually appropriate for *org:political\_religious\_affiliation* and not *org:member\_of*.
- A relationship consisting solely of the two groups interacting in a specific event context is not enough evidence to constitute a religious/political affiliation.
- Former political or religious affiliations are correct responses for this slot.

Entity	Document Context	Correct Filler
Abu Sayyaf	Abu Sayyaf Muslim extremist group	Muslim
Abu Sayyaf	Abu Sayyaf extremist group	N/A
Maryland Democratic Party	The Maryland Democratic Party is the state affiliate of the United States Deomocratic Party in the U.S. State of Maryland.	United States Democratic Party
Hungarian Reformed Church	The Hungarian Reformed Church is a Reformed Church in the Calvinist tradition.	Calvinist

## 4.3 org:top\_members\_employees

**Content:** Name

**Quantity:** List

**Description:** The persons in high-level, leading positions at the assigned organization. Although the definition of 'leading position' is relatively broad, all Top Member/Employee positions should imply a level of decision-making authority over the entire assigned organization.

**Inverse Slot:** *per:top\_member\_employee\_of\**

- Note that both verbs (e.g., oversees, commanded, leads, etc.) and titles (CFO, CEO, President, Vice president, director, etc.) can be used as justification for selecting top member/employee fillers.

- When using titles to justify *org:top\_members/employees* fillers, be certain not to select individuals who lead subsidiaries or sub-departments of the assigned organization.
- Though far from exhaustive, the following titles should not be used to justify top member/employee fillers: spokesperson, senior group executive, chief customer officer (CCO), information officer, chief compliance officer, frontman, secretary for information, (Supreme Court) Justice, House minority leader, press secretary, representatives or members of leadership team, senior advisor, senior editor
- As with other slots, founders or owners who have no other position or relationship with the assigned organization are not acceptable answers for *org:top\_members\_employees*.
- Former top members/employees are acceptable fillers.
- Top members/employees of parent organizations are not considered top members/employees of respective subsidiary/member organizations (e.g. a superintendent of a school district would not be a top member/employee at a school within the district). See *org:subsidiaries* and *org:parents* for more details about these types of organizations.

Entity	Document Context	Correct Filler
United States Centers for Disease Prevention and Control	US CDC director Julie Gerberding	Julie Gerberding
Maryland Democratic Party	The Maryland Democratic Party is the state affiliate of the United States Democratic Party in the U.S. State of Maryland. The current state party chairman is Michael E. Cryor.	Michael E. Cryor
University of Virginia	Some of the most contended issues in the nation — concepts of healthcare, medical care access and coverage — were debated yesterday evening in Goldwin Smith Hall at an interactive discussion led by Dr. Arthur Garson, executive vice president and provost of the University of Virginia.	Arthur Garson
University of Virginia	Founded in the 1980s, the Rodman Scholars Program (named for Walter Sheldon Rodman, former professor and dean of the UVA engineering school) consists of the top 5-6 percent of each class of engineering students.	N/A
University of Virginia Engineering School	Founded in the 1980s, the Rodman Scholars Program (named for Walter Sheldon Rodman, former professor and dean of the UVA engineering school) consists of the top 5-6 percent of each class of engineering students.	Walter Sheldon Rodman
Crown Prosecution Service	Carmen Dowd, head of the Special Crime Division of the Crown Prosecution Service	N/A

#### 4.4 *org:number\_of\_employees\_members*

**Content:** Value

**Quantity:** Single

**Description:** The total number of people who are employed by or have membership in an organization.

**Inverse Slot:** n/a

- A number that reports just a particular subset of the total employees is not a correct filler for this slot. For example, a statement such as "Southwest employs 5100 pilots" would not be reflective of the total number of employees of the company, whereas a statement like "Southwest Airlines employs more than 35000 employees" would be.

- If it is clear that a count of employees/members was no longer true at the time a document was written, the count should not be considered acceptable as a slot-filler. However, if it is ambiguous whether a count of employees/members was true at the time that a document was written, the count is acceptable as a slot-filler.

Entity	Document Context	Correct Filler
United States Centers for Disease Prevention and Control	The CDC employs nearly 15,000 people in the United States and more than 54 foreign countries.	15,000 <i>Norm: 15000</i>
National Rifle Association	He stated that there are 80 million gun owners in the United States and yet there are only 4 million NRA members who are, "fighting for our rights."	4 million <i>Norm: 4000000</i>
National Football League	All 32 NFL teams have participated.	N/A

#### 4.5 org:members

**Content:** Name

**Quantity:** List

**Description:** Organizations or Geopolitical entities that are members of the assigned organization (the inverse of *org:member\_of*). While similar to *org:subsidiaries*, *org:members* is different because correct fillers are distinct entities that are generally capable of autonomously ending their membership with the assigned organization.

**Inverse Slot:** {*org,gpe*}:*member\_of*

- Programs or projects should not be considered organizations and different iterations of the same organization (e.g., the 111<sup>th</sup> U.S. Congress and the 112<sup>th</sup> U.S. Congress) should not be considered as distinct entities.
- Member organizations include sports teams in leagues, associations and conferences, members of trade associations, and member countries of international organizations.
- Former member organizations are acceptable answers for this slot.

Entity	Document Context	Correct Filler
NATO	With Bulgaria, Romania and Slovenia NATO members since 2004 and Albania and Croatia since April of this year...	Bulgaria; Romania; Slovenia; Albania; Croatia
Canadian Football League	The top seeded CFL Roughriders didn't hold that against Scheper, who was introduced Tuesday as their defensive line coach.	Roughriders

#### 4.6 org:member\_of

**Content:** Name

**Quantity:** List

**Description:** Organizations or geopolitical entities of which the assigned organization is a member itself (the inverse of *org:members*). For this slot, the assigned organization is a distinct entity from the parent organization and is generally capable of autonomously ending the membership relation.

**Inverse Slot:** *org:members*



- Programs or projects should not be considered organizations and different iterations of the same organization (e.g., the 111<sup>th</sup> U.S. Congress and the 112<sup>th</sup> U.S. Congress) should not be considered as distinct entities.
- *org:member\_of* includes conferences/leagues of sports teams, trade associations and their member organizations.
- Former membership relationships are also acceptable answers.
- If it is clear that either an *org:member\_of* or *org:parents* relationship exists between the assigned entity and another organization, but it is unclear which of the two slots correctly defines the relationship, *org:member\_of* should be selected (see Badr Organization example).

Entity	Document Context	Correct Filler
Saskatchewan Roughriders	The Roughriders didn't hold that against Scheper, who was introduced Tuesday as the CFL team's defensive line coach.	Canadian Football League
Badr Organization	Sadr's followers accused their rivals, especially the Badr Organization, the armed wing of the Islamic Supreme Council of Iraq, a powerful Shiite party led by Abdul Aziz al-Hakim, of using...	Islamic Supreme Council of Iraq
Bulgaria	With Bulgaria, Romania and Slovenia NATO members since 2004 and Albania and Croatia since April of this year...	NATO

#### 4.7 *org:subsidiaries*

**Content:** Name

**Quantity:** List

**Description:** Organizations that are subsidiaries of the assigned organization (the inverse of *org:parents*). Subsidiaries are subsumed under the assigned organization, rather than being distinct entities.

**Inverse Slot:** *org:parents*

- Programs or projects should not be considered organizations and different iterations of the same organization (e.g., the 111<sup>th</sup> U.S. Congress and the 112<sup>th</sup> U.S. Congress) should not be considered as distinct entities.
- While the term 'subsidiary' is most commonly used in reference to commercial organizations, the *org:subsidiaries* slot is meant to include other types of organizations as well. Correct fillers for this slot include regional branches of a central organization, organizations owned by the assigned organization, and departments or sports teams of a university.
- Without additional information, an *org:subsidiaries* relation cannot be inferred to exist between two or more organizations that enter into a joint venture as these relations are often equal. However, these organizations should be classified as the parents of the new organization(s) resulting from the agreement.
- Boards should be classified as subsidiaries of their respective organizations.
- A brand is generally **not** considered a subsidiary.
- Former subsidiary organizations are acceptable responses.

Entity	Document Context	Correct Filler
African Development Bank	the Africa Export/Import Bank, a subsidiary of the African Development Bank based in Cairo, Egypt	the Africa Export/Import Bank

SLDN	"We do not, nor would we want to, dictate how members of our board or our Military Advisory Council make their political views known", an SLDN spokesperson stated.	board; Military Advisory Council
Treasury Department	The Treasury Department's Bureau of Engraving and Printing introduced the new design,	Bureau of Engraving and Printing
American Medical Association	The AMA's Office of Alcohol and Other Drug Abuse promotes temperance and lobbies for a reduction of alcoholic beverage advertising	Office of Alcohol and Other Drug Abuse
Tyco Healthcare	Tyco Healthcare produces medical supplies under various brand names, from Curity bandages to...	N/A
Fyffes PLC	Ireland's Fyffes, Europe's largest fruit and vegetable importer, and its German-based joint venture Weichert said they would examine the charges and respond in due course.	N/A

#### 4.8 org:parents

**Content:** Name

**Quantity:** List

**Description:** Organizations or geopolitical entities of which the assigned organization is a subsidiary (the inverse of *org:subsidiaries*). While similar to *org:member\_of*, *org:parents* is different because the assigned organization is subsumed under the parent organization(s), rather than being a distinct entity.

**Inverse Slot:** {*org,gpe*}:*subsidiaries*

- Programs or projects should not be considered organizations and different iterations of the same organization (e.g., the 111<sup>th</sup> U.S. Congress and the 112<sup>th</sup> U.S. Congress) should not be considered as distinct entities.
- Parent organizations include the central organization of which the assigned entity is a regional branch, the organization owning the assigned organization, or the university of which the assigned is a department or sports team.
- Without additional information, an *org:parents* relation cannot be inferred to exist between organizations that enter into a joint venture as these relations are often equal. However, these organizations should be classified as the parents of the new organization(s) resulting from the agreement.
- When companies merge to form a new entity, the original companies should be considered as dissolved (see *org:date\_dissolved*).
- Former parent organizations of the assigned entity are valid fillers.
- If it is clear that either an *org:member\_of* or *org:parents* relationship exists between the assigned entity and another organization, but it is unclear which of the two slots correctly defines the relationship, *org:member\_of* should be selected (see Badr Organization example).

Entity	Document Context	Correct Filler
Africa Export/Import Bank	the Africa Export/Import Bank, a subsidiary of the African Development Bank based in Cairo, Egypt	African Development Bank
LSG Lufthansa Service Holding GmbH	Its policy-setting supervisory board had approved plan to reorganize Lufthansa's catering unit, LSG Lufthansa Service Holding GmbH, into a shareholder firm	Lufthansa

Badr Organization	Sadr's followers accused their rivals, especially the Badr Organization, the armed wing of the Islamic Supreme Council of Iraq, a powerful Shiite party led by Abdul Aziz al-Hakim, of using...	N/A ( <i>org:member_of</i> should be used)
Hong Kong Disneyland	Local legislators criticized the poor performance of Hong Kong Disneyland, with one suggesting Friday the government should consider abandoning its joint venture with The Walt Disney Co.	The Walt Disney Co.; Hong Kong

#### 4.9 org:founded\_by

**Content:** Name

**Quantity:** List

**Description:** The person, organization, or geopolitical entity that founded the assigned organization.

**Inverse Slot:** {*per,org,gpe*}:*organizations\_founded\**

- Programs or projects should not be considered organizations and different iterations of the same organization (e.g., the 111<sup>th</sup> U.S. Congress and the 112<sup>th</sup> U.S. Congress) should not be considered as distinct entities.

Entity	Document Context	Correct Filler
Abu Sayyaf	the Abu Sayyaf when it was founded in the early 1990s by Afghan-trained Muslim firebrand Abubakar Abdurajak Janjalani	Abubakar Abdurajak Janjalani
National Rifle Association	Dismayed by the lack of marksmanship shown by their troops, Union veterans Col. William C. Church and Gen. George Wingate formed the National Rifle Association in 1871.	William C. Church; George Wingate

#### 4.10 org:date\_founded

**Content:** Value

**Quantity:** Single

**Description:** The date on which the assigned organization was founded.

**Inverse Slot:** n/a

Entity	Document Context	Correct Filler
Abu Sayyaf	the Abu Sayyaf when it was founded in the early 1990s by Afghan-trained Muslim firebrand Abubakar Abdurajak Janjalani	the early 1990s <i>Norm:</i> 19XX-XX-XX
National Rifle Association	Dismayed by the lack of marksmanship shown by their troops, Union veterans Col. William C. Church and Gen. George Wingate formed the National Rifle Association in 1871.	1871 <i>Norm:</i> 1871-XX-XX

#### 4.11 org:date\_dissolved

**Content:** Value

**Quantity:** Single

**Description:** The date on which the assigned organization was dissolved. When companies merge to form a new entity, the original companies should be considered as dissolved.

**Inverse Slot:** n/a

Entity	Document Context	Correct Filler
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Compaq	Once the largest supplier of personal computing systems in the world, Compaq existed as an independent corporation until 2002, when it merged with Hewlett-Packard.	2002 <i>Norm: 2002-XX-XX</i>
League of Nations	It failed to prevent the outbreak of the Second World War, at the end of which the League itself was officially disbanded in 1946.	1946 <i>Norm: 1946-XX-XX</i>

#### 4.12 org:country\_of\_headquarters

**Content:** Name

**Quantity:** Single

**Description:** Countries in which the headquarters of the assigned organization are located. This slot must be filled with a country name.

**Inverse Slot:** *gpe:headquarters\_in\_country\**

- Former countries of headquarters are acceptable answers.
- If an organization is intimately tied to a country in its purpose, and its name includes the country (e.g. Paralyzed Veterans of America), you can infer that the organization is headquartered in the country. Note, however, that this inference cannot be used if another document explicitly states that an organization is headquartered in a country other than that included in its name (e.g., “the mission of the Friends of Scotland is to be the primary US organization promoting...”). Additionally, note that the word “National” in an organization’s name cannot be used to infer country of headquarters.
- Possessive and adjectival constructions can be used to indicate an organization's country of headquarters.
- The country of headquarters for an embassy should be the country in which it is actually located, not that which it represents.
- Geographical areas of contention are valid fillers (e.g. Palestine, Taiwan, Western Sahara).
- City-states (e.g. Vatican City, Singapore) should be classified at the country level.

Entity	Document Context	Correct Filler
Harkat-ul-Mujahideen	the Islamabad headquarters of Harkat-ul-Mujahideen	N/A
League of Nations	This union, which came to be known as The League of Nations, came into being on the 10th January 1920, with its headquarters in the Palace of Nations in Geneva, Switzerland.	Switzerland
CSS	CSS is a Brazilian rock band from São Paulo.	Brazilian <i>Norm: Brazil</i>
MECO	MECO is the de-facto embassy of the Republic of Philippines in Taiwan, handling trade and cultural exchanges.	Taiwan
FirstGroup	On the corporate front, Britain's biggest bus firm FirstGroup...	Britain
FirstGroup	British bus firm FirstGroup announced...	British <i>Norm: Britain</i>

#### 4.13 org:stateorprovince\_of\_headquarters

**Content:** Name

**Quantity:** Single

**Description:** Location of the headquarters of the assigned organization at the state or province level. This slot must be filled with a state or province name.

**Inverse Slot:** *gpe:headquarters\_in\_stateorprovince\**

- Former states or provinces of headquarters are acceptable answers.
- Capitol districts (e.g. Washington D.C.), emirates (e.g. Dubai), and British counties should be classified at the state or province level (you should use an Internet search to clarify any uncertainties about foreign government systems).
- Chechnya and the Gaza Strip should also be classified at the state or province level.
- When two related GPEs share a name (e.g. New York [State] and New York [City]) and it is unclear which of the two is being referred to, only the slot of the upper-most level GPE should be filled (e.g. New York [State]).
- If an organization is intimately tied to a state/province in its purpose, and its name includes the state/province (e.g. New South Wales Rugby Union), you can infer that the organization is headquartered in the state/province. Note, however, that this inference cannot be used if another document explicitly states that an organization is headquartered in a state/province other than that included in its name.

Entity	Document Context	Correct Filler
Abu Sayyaf	Abu Sayyaf, headquartered in the southern province of Basilan	Basilan
League of Nations	This union, which came to be known as The League of Nations, came into being on the 10th January 1920, with its headquarters in the Palace of Nations in Geneva, Switzerland.	N/A
National Action Network	Sharpton recently announced that with Wright's backing, he was setting up a chapter of his New York-based National Action Network in Chicagoland.	New York
CSS	CSS is a Brazilian rock band from São Paulo.	N/A

#### 4.14 org:city\_of\_headquarters

**Content:** Name

**Quantity:** Single

**Description:** Location of the headquarters of the assigned organization at the city, town, or village level. This slot must be filled with a city, town, or village name.

**Inverse Slot:** *gpe:headquarters\_in\_city\**

- Former cities, towns, or villages of headquarters are acceptable answers.
- Hong Kong, Macau, Gaza, and Jewish settlements should be classified as cities.
- Capitol Districts (e.g. Washington D.C.) should **not** be classified at the city level, rather they should be classified at the state or province level.
- GPEs below the city level (e.g. 5 boroughs of New York City) are **not** valid fillers.
- When two related GPEs share a name (e.g. New York State and New York City) and it is unclear which of the two is being referred to, only the slot of the upper-most level GPE should be filled (e.g. New York State).
- If an organization is intimately tied to a city in its purpose, and its name includes the city (e.g. the Philadelphia Classical Guitar Society), you can infer that the organization is headquartered in the city. Note, however, that this inference cannot be used if another document explicitly states that an organization is headquartered in a city other than that included in its name (e.g., “the University of Texas at Dallas, which is located in the town of Richardson...”).
- City-states (e.g. Vatican City, Singapore) should be classified at the country level.

Entity	Document Context	Correct Filler
Harkat-ul-Mujahideen	the Islamabad headquarters of Harkat-ul-Mujahideen	Islamabad
League of Nations	This union, which came to be known as The League of Nations, came into being on the 10th January 1920, with its headquarters in the Palace of Nations in Geneva, Switzerland.	Geneva
CSS	CSS is a Brazilian rock band from São Paulo.	São Paulo
National Action Network	Sharpton recently announced that with Wright's backing, he was setting up a chapter of his New York-based National Action Network in Chicagoland.	N/A
MBIA	MBIA officials at the company's headquarters in Armonk, New York...	N/A

#### 4.15 org:shareholders

**Content:** Name

**Quantity:** List

**Description:** Any organization, person, or geopolitical entity that holds shares (majority or not) of the organization. Former shareholders are acceptable responses.

**Inverse Slot:** {per,org,gpe}:holds\_shares\_in\*

- Programs or projects should not be considered organizations and different iterations of the same organization (e.g., the 111<sup>th</sup> U.S. Congress and the 112<sup>th</sup> U.S. Congress) should not be considered as distinct entities.

Entity	Document Context	Correct Filler
Royal Dutch Shell	In a rare public statement, Standard Life Investments, a top-ten shareholder, signaled that it would be voting against the discretionary payments at Shell's annual meeting this month.	Standard Life Investments
Hapag-Lloyd AG	Pressaug spokeswoman Bettina Doerr said the diversified steelmaker has sent letters to Hapag-Lloyd's large shareholders, including Deutsche Lufthansa AG and Veba AG, to express interest in buying their stakes.	Deutsche Lufthansa AG; Veba AG

#### 4.16 org:website

**Content:** String

**Quantity:** Single

**Description:** An official top level URL for the organization's website.

**Inverse Slot:** n/a

- Former websites are acceptable answers.
- Websites may be extracted from email addresses that are clearly tied to the organization

Entity	Document Context	Correct Filler
Internal Revenue Service	This form is available by calling the IRS at 1-800-TAX-FORM (1-800-829-3676) or on the IRS Web site at IRS.gov.	IRS.gov
National Rifle Association	Perhaps the best source available is the National Rifle Association (ww.nra.org).	www.nra.org

The New York Immigration Coalition	For more information, please contact nc ... @thenyic.org or david ... @thenyic.org.	thenyic.org
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